

sputnik

January 1970

MONTHLY DIGEST



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BELGIUM	70 100	ZAMBIA	24 100	HONGKONG	20 100
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Letters to the Editor

Since I began receiving *SPUTNIK* regularly late in 1968 the factual content, design and broad range of topics included has made a good impression on me. This magazine opened a more illuminating view or attitude towards your country, its people, customs and especially the diversity of culture.

Terzy W. Colvin, Evansville,
Indiana, U.S.A.

I have just returned from a most delightful visit to the USSR with *Promoting Enduring Peace*, headed by Dr. Jerome Davis. We met with your press. I have come back to the USA with greater hope and confidence that our nations must get along together. The Russian people were friendly towards us. I believe this people to people mission should be increased so we can understand one another.

Terrence Peterson, Longboat Key,
Florida, U.S.A.

I have brought a number of the issues of your publication to the University of Wisconsin Parkside Library to complete the collection of *SPUTNIK* magazine.

Edward Sandberg, Kenosha,
Wisconsin, U.S.A.

SPUTNIK is an excellent magazine. We in the "free" West find out so little about political, economic, social and cultural affairs in the USSR.

Our so-called independent press deliberately tries not to give readers

an objective impression of the Soviet Union. Such distortion is one of the most monstrous conjuring tricks. This is all the more regrettable since cooperation between the other European states and the USSR is a factor which cannot be left out of account. The creation of a United Europe without the Soviet Union is unthinkable.

The German edition of *SPUTNIK* is free of such tendencies. The themes chosen cover a wide range. I personally should be glad if *SPUTNIK* would give more political material presented from the Soviet point of view. Political events make one think: The dark forces of reactionism and neo-nazism are growing at a furious pace. Surely the peace-loving nations will not be plunged into terrible disasters once again!

This is why the voice of the Soviet Union must not be ignored.

I consider that the work of *SPUTNIK* strengthens friendship among nations.

Karl Breisneder, Klosterneuburg,
Austria

I work as a teacher of Russian in a Polish school. I often receive Soviet magazines, but not one of them is so helpful in my work as *SPUTNIK*. It has a great deal of interesting material on various subjects. Apart from my work in the school I am an external student at the teachers training institute. I am now starting to write my diploma work, with *SPUTNIK* as my theme.

Czesława Balasjak, Czeszochowa, Poland

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Pocket-size SPUTNIK, richly illustrated with many coloured plates, brings you the pick of 11,000 Soviet publications, newspapers and magazines — in easy-to-read condensed form.

I very much like the historical articles and material about architectural masterpieces. Your colour illustrations make the magazine particularly delightful. And for taking into account the request of your readers, including myself, and publishing a philately feature in SPUTNIK, I want to express the thanks of all philatelists.

I believe that most readers would welcome the publication of a photograph of a leading Soviet sportsman in each issue with a short account of his life and achievements.

Stanislaw Pabis, Warsaw, Poland

For a long time I have been thinking of writing to you to tell you how interesting I find SPUTNIK, not so much the political articles (I don't understand enough about politics) but the articles on the arts — theatre and ballet, on scientific and medical research, on the various republics of the Soviet Union. We have so few sources of such information.

It would be good to have an article about the life and work of a nurse.

Dora Frisch, Göttingen,
Federal Republic of Germany.

I have the following suggestion to make: Suppose you publish a set of photographs from the Soviet Union as a supplement to SPUTNIK. They could be calendar-size. As time goes by the reader will have an excellent album. (I am thinking of photographs like those of Gippenreiter.) I am sure that this would be of great interest to many readers.

Wolfgang Söbelsmayr, Andorf, Austria

I have been a subscriber to your SPUTNIK from the very first number. I read it "from" and "to", starting with the readers' letters and going on to the very last page. It is odd, but everybody praises your magazine, they all have good things to say of it. And no one at all criticizes you. Indifference? Lack of understanding? Sinful creature that I am,

I have decided to criticize you. "There is no progress without criticism". Dear editors, has no one ever drawn attention to a great, unpleasant, nerve-racking shortcoming — you turn over the pages, and they all come apart. Surely something can be done to put this right? Ah, at, at! And this in our technological age!

At the same time there is a request: let's have more humorous stories. I should so like to see some good, subtle humour, but not heavy-handed stuff! As far as your cartoons are concerned, they are flat, do not make their point and do not raise a smile. I hope my letter will be printed with the others and that you'll take my apt remarks fully into consideration.

A. Osipyan, Teheran, Iran

It seems to me that you have too little to say about Soviet people, about their lives, their work and their interests. The Soviet Union is a country with many different nationalities, each of which has its own culture, its own unique morals and customs.

Anna Odrobinska, Gdansk-Oliwa,
ul. Tetmajera 7a, Poland

PEN FRIENDS WANTED

I am interested in having pen-pals from the countries in Europe. I am 16 years old and my hobbies are collecting stamps and viewcards, cooking, reading and listening to folk and pop music. I prefer boy pen-pals, but any girls who write me will also receive a reply.

Angela Zeman, c/o Principal Marine Diesel Training Centre, Soukanda, P.O. P.I.D.C., Narayanganj, East Pakistan

I am a teacher of 21. I would like to correspond with friends from different countries of the world. I know English, Russian and German. My hobbies are philately, sports, travel.

Lech Zasicki, Leszno, ul. Kluczowa 16A,
Poland

Continued on p. 97

sputnik

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The Editors

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Choosing a Career

FREEDOM TO MAKE A MISTAKE

by **Sergel BATYSHEV**
D.Sc. (Pedagogics),
Corresponding Member
of the USSR Academy
of Pedagogical Sciences.

The correct choice of a trade or profession is one of the most important and one of the most difficult questions which young people face. They need help, but how much? There has been wide discussion among specialists in the Soviet Union on the subject of vocational guidance, and recently the newspaper *Literaturnaya Gazeta* published two articles presenting opposing views under the heading "Man and His Work". The articles have been condensed for SPUTNIK.

The day a choice of profession is made is a red letter day in every man's life, for everything from that day onward is to some degree influenced by that choice.

In our country each person is free to choose his job, because education is free. But there is another side to the matter. Not

everyone can be a cosmonaut; we are powerless to launch everyone into space. Society needs people skilled in a vast number of trades and professions in definite proportions, so it is necessary to coordinate the talent and desires of people with the overall requirements of the economy. To do

this satisfactorily we must stimulate interest in the more prosaic, but equally important jobs.

Something has been done in this direction lately. Questionnaires designed to discover the interests of students are circulated in schools, excursions are organized to industrial enterprises and discussions are arranged between the youngsters and people from various trades and professions. But so far there have been few positive results.

Of the thousand students at special trade schools in Kazakhstan polled recently, few showed that they had really thought seriously about their future careers. In reply to the question: "Why did you enrol in your trade school?" 87.4 per cent said that they had read the school's advertisement in the newspaper or had heard about it from friends; five per cent said they had done it at the instigation of their parents, and three per cent replied that teachers had suggested that they go to a trade school. The remainder could not answer this apparently simple question.

So it seems that most youngsters choose a trade or profession without giving serious thought to whether it is really what they want or whether they are capable of doing the job they have chosen. It is simply a haphazard, hit-or-miss affair.

Sociologists in Kazakhstan have found that more than half the students in the trade schools (53.2

per cent) are not happy with their choice and would like to change. Thus we see that the free choice of a career is really freedom to make a mistake. As most trade schools make every effort to push their students through to graduation, it means that dissatisfied young men and women start thinking of making a change when they are on the job. And that involves great social losses.

First, there is a huge wastage of money on vocational training. Experience in just one region, Sverdlovsk in the Urals, demonstrates this problem. Six million roubles were lost in one year when six thousand young people changed their occupations.

Statistics show that approximately three million people throughout the country change jobs each year, and of these, forty per cent change their trade as well. This means that time, money and energy expended on training more than one million workers have been wasted.

Then, of course, there is a heavy loss in production too. When people change jobs there is always some lapse of time between finishing up one job and starting a new one, and everyone takes time to settle down before they work at full capacity after a change. It is estimated that full capacity is not reached until the fourth month after a new start. During the first months such people manage to accomplish only from 70 to 75 per cent of a normal work quota, 90 per

cent in the second month and 95 to 97 per cent in the third.

And still we have the trade schools hanging on to every student they can because few youngsters are attracted to them in the first place. This is another aspect of the free choice of vocation.

Until recently school-leavers were not very concerned about their future. After school they would enter a college or university, quite often without any real vocation. It was social orientation, pure and simple. The conscious choice of a trade or profession was pushed into the background and at the same time a certain social stigma became attached to the humbler manual trades.

Now things have changed. Universal full secondary education has been introduced, and the colleges and universities cannot possibly take all the secondary school leavers. Nor is this necessary. The national economy requires a ratio of 1:4, specialists with higher education to specialists with secondary education. At present the ratio is 1:2. Obviously the secondary schools should be orientated towards preparing future workers in different trades.

How and when should this be done?

I think it should begin as early as possible; in the very first year of secondary school. And a special subject, "Choosing a Career" (vocational guidance), should be

introduced in every form. This subject should include detailed information about every trade and profession to be found in the city, district and republic in which the students live. Those who teach this subject should receive special training themselves, and, in addition, there should be special vocational guidance centres set up, staffed with experienced people who could give advice on the spot and could also visit schools in neighbouring towns and villages to act as counsellors.

At present the literature on the subject is very small and much is needed. Books and reference material should be written and, it seems desirable that a magazine *Pororientatsiya* (Vocational Guidance) be published. Furthermore, the newspapers should publish many more articles about the various trades and professions, for the whole question of choosing the right career is an important social issue.

It would also be expedient to set up an All-Union Council for Vocational Guidance under the auspices of the Ministry of Higher and Special Secondary Education which could co-ordinate and direct research, train specialists and finance the work in this field.

Something along the lines I have suggested would ensure that ultimately each person would be able to work at a job which was not only socially necessary but

also satisfied his own interests and abilities.

A ramified government service of professional vocational guidance, embracing every boy and girl at school is the only way of making the best use of all human potentialities.

What work should these young people be prepared for and how should it be done?

The "professional orientation" school of thought maintains that by the use of questionnaires and other forms of aptitude testing, the work done by children at school should be directed towards training for some specific field of work. Some maintain that a subject called something like "Choosing a career" should be compulsory, others that it should be optional, and there is a divergence of opinion as to just when such a subject should be introduced into the school syllabus.

The extremists would have each school-leaver issued with a document laying down the trade or profession and even the particular enterprises where the student should work. We cannot support this. It is little short of coercion and as such is quite unacceptable.

Experience in countries where vocational guidance and aptitude tests are in wide use has proved that there are no means of producing a reliable analysis of a person's abilities and inclinations. Man's inner world is too deep and complicated and the nature of talent is too enigmatic to be revealed by the crude instrument of questionnaires and tests.

Students in the United States of America take three tests each year, and in Britain tests are made from the earliest school years right through to post-graduate courses.

Some firms engaged as management consultants, who specialise in staff selection, estimate that with all

NO "STREAMING", PLEASE!

by Dmitri KADALOV M.Sc.
(Economics) and Margarita
MONINA M.Sc. (Technology)

There are many advocates, these days, of "professional orientation" — vocational guidance, aptitude tests and "streaming". Society has certain requirements as to numbers of people skilled in the various countless trades and professions. Sociological research shows that 80 per cent of our students want to take up a career not associated with manual labour. Today, about 12 per cent of all the gainfully employed population of the USSR are engaged in mental labour and it is unlikely that this figure will rise in the future.

the tests from 10 to 15 per cent of the people they choose do not prove to be suitable for the job they were employed to do. Employers who use these management consultant firms maintain that the figure is as high as 40 per cent. And there are plenty of examples of wrong conclusions which affect both children and adults.

At one British school, children whom tests showed were incapable of learning foreign languages managed to get permission to study French and this "hopeless" lot obtained better results than the "bright" children. This story has a happy ending, but there are many sad stories of people whose self-confidence and enthusiasm has been destroyed by over-hasty conclusions based on a series of empirical tests, and who have been pushed onto the wrong path.

An unavoidable drawback of any test is that it can only assess inherent qualities and those which have already manifested themselves. Such tests proceed from a "fatal predestination" and do not touch the question of **developing** abilities. Everyone knows that young people have many latent talents which can manifest themselves later under favourable conditions. We have only to look at the biographies of many famous people who, in their younger days, were expelled from school or university because they were "dull".

Geniuses and morons are exceptions. Most people have moderate abilities and to place the emphasis in a one-sided way is to rob people of a chance to do as well as they

might. And, quite apart from the point of view of the individual, this does not correspond to the requirements of modern production.

Differences between various skills are gradually disappearing today. The common scientific and technological base of many trades and professions is broadening. Automated production lines are leading to the position where one man must have a knowledge of several different trades. The same thing is happening in the sphere of mental labour too. The scientific and technological revolution has meant that a sociologist or a linguist must have a knowledge of mathematics, and to run a complicated mechanism like an artificial heart a doctor must have an idea of the technology of precision instrument making as well as a knowledge of medicine.

Narrow professionalism is a thing of the past. Broad general knowledge is becoming more and more important regardless of any specific trade or profession, and to give schoolchildren this knowledge, to preserve and develop their talents, it is necessary to teach them a wide range of general subjects.

The final point, and a very pertinent one is that work should bring people pleasure. Even if strictly accurate methods can be devised to assess a person's capabilities, all the conflicts inherent in "streaming" will not disappear. Certainly it may be possible to rationalise production and to increase labour productivity, but that still leaves out the personal factor. Capabilities and inclinations do not always coincide. From the

viewpoint of the national economy perhaps a man with "golden" hands should remain, for example, a fitter all his life. But what if he himself wishes to acquire a new trade or profession? Adherents of compulsory professional orientation would say that a good fitter should not become a mediocre designer, and as far as production is concerned they are no doubt correct, but they are wrong from the human interest angle.

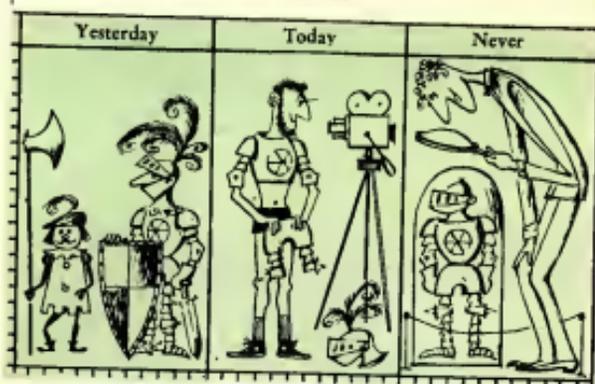
We do agree that freedom to

choose a career can lead to mistakes and that additional training which is not prompted by the immediate needs of production causes material losses, but we maintain that rigid streaming in education is fraught with greater dangers.

Would it not be wiser to risk the chance of having to meet relatively minor additional expense than to force people into jobs which they dislike and from which they derive no satisfaction?

ew

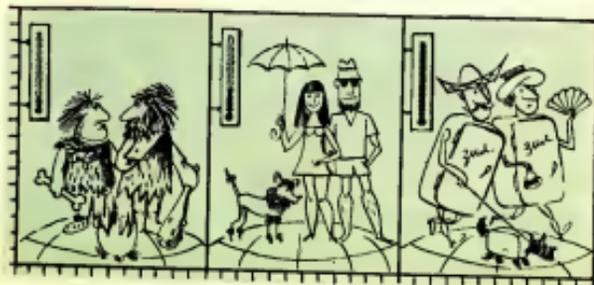




by Sergei VLADIMIROV
from the magazine PRIRODA

Mankind in 100 Years

— An Essay in Extrapolation



It is said that when an English film director once decided to make a film showing medieval knights in armour, he found that the authentic gear did not fit contemporary Englishmen — people had grown taller in the meantime.

Now it has been found that during the past 80 years the average height of 13-year-old boys in Europe and Japan has been rising by 0.8 of an inch every ten years. Just imagine what would happen if this process went on indefinitely! In about 100 years from now our descendants would become giants feeling uncomfortable in contemporary homes.

But then who can say definitely that these homes or anything else on Earth, for that matter, or the Earth itself, will still be in existence in 100 years' time? This is not necessarily to imply destruction by a super-bomb or even a collision with a giant asteroid. There is the possibility, according to those who make it their business to calculate such things, that we shall simply "eat" ourselves out of existence.

Such a conclusion can be reached by using the method known as "extrapolation", that is, calculating from known terms a series of other terms lying outside the range of the known terms.

A symposium was told last year that an ocean of printed matter is being turned out daily in the world — almost one hundred signatures per scholar, scientist or engineer. Extrapolating the curve of growth of the amount of printed matter to discover what it would be like in one hundred years' time, we would

see that the entire mass of the Earth would have to be reprocessed into paper, to meet the demand for books, pamphlet, magazines and newspapers! Some may hope that by the year 2069 mankind will reach other planets, and meet the demand for paper at the expense of Jupiter and Pluto!

By extrapolating the curve of growth of world power output, experts have concluded that in another 1000 years' time mankind will be able to meet its power requirements only by using the entire flow of solar radiation, and after a further 500 years there would still be a power famine if mankind failed to turn the entire mass of the sun into usable energy. But then, how would mankind live without the sun?

Going on with our extrapolations, we find that after the year 4000 mankind could survive only by spreading out in space at a velocity approaching that of light — in order to turn all the matter man would meet on the way, interstellar dust and gas, meteorites, asteroids, planets, and stars, into energy for man's use.

Calculations like these were reported to a 1967 symposium by Grigori Ildis, a research worker of the Astrophysics Institute of the Academy of Sciences of Kazakhstan (a Soviet Republic in Central Asia).

One of the more alarming extrapolations could be that in less than 100 years any issue of our innumerable newspapers would be publishing information about current extrapolations showing incontrovertibly that man had long since ceased to exist!

THE MOTHER OF LENIN

by Ivan ZIUZIUKIN

from the magazine YUNOST

According to relatives and close friends, Maria Alexandrovna Ulyanova, née Blank, was a beautiful and stately girl, pleasant and exceptionally even-tempered. Judging by everything, hers was a gifted personality. Her mother was German, and from childhood Maria spoke not only Russian and German, but English and French as well. She was well-read, had a fine understanding of music and played the piano. Her manners and behaviour were such that acquaintances assumed she had been educated in one of the exclusive schools for young ladies. In fact, she was schooled at home.

Having become a wife and mother, she devoted herself wholly to her family. In contrast to many married women in her circle, she found no pleasure in empty chatter, social

occasions, clothes, etc. In the memory of her children and her few but intimate friends, she has remained a gentle woman of few words, always busy and happy because she had many children, many cares.

Her husband, Ilya Nikolayevich, worked tirelessly to carry out his far from easy duties. For days and even weeks he was away from home on inspection trips of government schools in district settlements and villages. It largely fell to his wife to fill the days and inspire the childhood of their sons and daughters.

Six noisy, cheerful children, all close in age, ran around in the garden, picked and ate strawberries, played Indians, or soldiers of Garibaldi or Lincoln, produced their own handwritten magazine... And over their chatter and laughter presided

(the majestically serene Maria Ulyanova, the just judge of debatable actions or disagreements, the first magician of their childhood, the first sage of their world. She not only observed their games, she took part in them with such enthusiasm that no one could suspect she was, after all, only amusing them.

In the memories of her children lived astonishment at the fact that she rarely had to repeat her admonitions twice. It must have been that her voice, glance and gesture were in such harmony that a child quickly comprehended what was expected of him. Among punishments, her children recall that she most often resorted to the following: the offender would have to sit in "the black chair" next to Ilya Nikolayevich, who was usually deep in his paper-work. However, the range of rewards for good behaviour was considerably greater. Some of them give a clue to the mother's character and methods of teaching.

"Mother gave me a big ball of red wool and a crochet hook. I got busy and soon to my surprise noticed an object sticking out of the ball of wool. As I crocheted on, little toys and sweets appeared out of the ball..." (M. I. Ulyanova).

Or the joys of responsibility: "When we decided to have tea in the garden arbour, everyone pitched in. Sasha used to carry out the samovar and everybody else brought what they could carry... The servants were not bothered, we did everything ourselves... After tea there were enough jobs for all; the girls helped mother to wash up the dishes and we

carried everything back." (D. I. Ulyanov).

"Everybody's cheerful, everybody's laughing. And you feel at home with this companionable family." This was the impression of a friend.

Like any good mother, Maria Ulyanova wanted her children to be better than their parents — in intelligence, culture and position in society. For a long time she was their teacher. ("Mother taught us to read and write." — A. I. Ulyanova-Elizavrova). All the children were well-mannered, good students, while Vladimir and Olga were brilliant. In the character evaluation given to Vladimir upon graduation it was said: "The fruits of good upbringing were evident in Ulyanov's excellent behaviour."

Because of their mother's training, all the children were quick at foreign languages and Lenin, as is known, had a perfect grasp of some. All the children, without exception, learned to love music and nature. A true mother, Maria Ulyanova was able to fully pass on her spiritual inheritance to each one.

The further away from us in time lie the days when the Ulyanov family lived under one roof, the more obvious becomes the truth: the circumstances and atmosphere in that home were conducive to a critical approach to reality which eventually grew into revolutionary consciousness. Naturally, the Ulyanov children were not educated solely by their parents, but by their surroundings, books and schools as well. And even though as long as their father was alive the brothers and sisters did not



Maria Alexandrovna Ulyanova, Lenin's mother (1823—1916).



The Ulyanov family, 1879; Vladimir Ulyanov (Lenin) on the right
in the front row.

suffer economic privations or political oppression themselves, nevertheless at a tender age they realized that in many ways the world was imperfect, brutal and unjust. They inescapably reached this conclusion when they compared the purity, the richness of relationships in their own home, with the depressing soullessness in which most of the public officials of Simbirsk existed; when they saw the contrast between the incorruptible honesty of their father and mother and the barefaced bribetaking of some officials.

At first glance the peace-loving atmosphere in the Ulyanov home does not seem to fit the fact that a member of the family — Alexander, the eldest brother — was ready to assassinate the Czar and was fully aware of his responsibility and the risk of death. Another member of the family, Vladimir, about whom it was written in that same character evaluation that "not a single occasion has been noted when by either word or deed he has caused teachers or those in charge to think ill of him", in his very first months at university took part in student demonstrations and was, according to one eye-witness account, "in the first ranks, very agitated, practically with clenched fists".

It never occurred to the state security officers that the first sparks of mutiny in the children were lit by the parents themselves. All the children, without exception, embarked on a road of struggle against the existing order, and the hard-working director of schools, Ilya Ulyanov and his gentle, careworn wife, Maria,

were responsible. A person who has been raised with love and affection will be able to respond to the sufferings of others. Someone brought up in self-respect will loathe any type of arbitrary authority. A healthy, full-blooded childhood can awaken an awareness of injustice as surely as an oppressed one. Tolstoy, who had led a sheltered childhood, in maturity became an enemy of his class. It is quite logical that a harmonious and happy childhood can lead to rejection of an unjust social reality.

Nevertheless, nothing is so amazing about Maria Ulyanova as her willpower and tenacity. She drank the cup of bitterness to its dregs; she had to bear the most terrible losses in a brief span of time. Her griefs would have broken a lesser person:

1886 — her husband dies

1887 — her son Alexander and daughter Anna are arrested in March in St. Petersburg

1887 — in May Alexander is hanged

1887 — in December Vladimir is arrested, expelled from university and exiled

1891 — her daughter Olga dies

1895 — Vladimir is again arrested and exiled to Siberia in 1897.

In the following years her other son Dmitri and daughter Maria were arrested and exiled. The men and women to whom her children became attached were all revolutionaries and were all persecuted.

Even this cursory examination of the sufferings which fell to the lot of Maria Ulyanova reads like a cruel

conspiracy of fate. But she did not bend her head.

Maria Ulyanova learned of Alexander's execution in the street, when she was on her way to visit Anna in prison. She did not collapse, did not scream. She had the fortitude to go on and not to tell her exhausted, anxious daughter that her brother was already dead.

The same fortitude was displayed by Vladimir and Olga who were then in Simbirsk. They were the first in the town to know of the execution and though still adolescents, they went to school and behaved in a manner that did not permit anyone to guess of the tragedy. Only Olga, the strain being too much, fainted on the second day.

Maria Ulyanova continued to fulfill her maternal duties in an exemplary fashion when she became a widow. It was not only a matter of raising a family on a small pension. The children who had so recently played Indians in the garden were growing up.

After the death of Alexander, 17-year-old Vladimir was the senior male of the family. His passage from youth to maturity was sudden, the break sharpened by his brother's martyrdom. In spite of the fact that at that time he had just left school and had not yet entered university, his mother yielded the final word in family councils to him and undertook no steps without consulting him.

Despite her great spiritual strength, Maria Ulyanova did not consider it right to dictate her own conclusions

to her children once they had started on their independent path in life. Only Alexander's revolutionary activities were unexpected to her. The rest of the children did not conceal their interest in illegal writings and later in illegal activities. She must have been mortally tired of the police descending on her and unceremoniously searching her home, of the dread of sentences passed on Vladimir, or Anna, or Dmitri or Maria. As a mother she could have demanded that at least one of her children settle down peaceably and remain beside her in her old age. But in the reminiscences of the Ulyanovs there is not even a suggestion that she ever asked any one of them to do that.

After they grew up, Maria Ulyanova saw less of Vladimir than any of her other children. The reasons for this lay first in his move to St. Petersburg, then gaol, exile in Shushenskoye and finally emigration abroad. This enforced separation placed an imprint of great tenderness on their relationship which could most often be glimpsed in mundane daily matters.

Lenin wrote often to his mother. In his letters he spoke of things that could only be written to a mother. Not because others would not understand, but because she could understand better than anyone else in the world. The following lines are from the first letter he sent her from St. Petersburg:

"At last I've found a nice room, it seems; there are no other tenants and the family is small and the con-

necting door with their apartment has been sealed, so the noise is deadened..."

Having dedicated himself wholly to revolutionary work, in spite of his undemanding nature, he was often short of money and therefore in some of his letters there is the boyish, frank request "to send a bit".

Perhaps he was never as confiding with anyone as he was with his mother. In his letters — and this casts a light on the personality of Maria Ulyanova — he describes at considerable length the places where he finds himself, whether by his own design or by another's.

"On the horizon are the Sayan Mountains or their spurs; some peaks are quite white and it is unlikely that the snow ever melts on them. Which means that in the artistic way there is something to see and so I did not write poetry back in Krasnoyarsk in vain... Unfortunately, I haven't got past the first verse!"

He writes of what he is working on, shares his impressions of plays and concerts, openly confesses his yearning for his home and native land and writes of the depression which now and then engulfs him in exile. ("I'm so tired of the slush and remember the real Russian winter with pleasure, sleigh-riding and the frosty, pure air...")

In one of his last surviving letters to her, sent from Zurich in March, 1916, he writes:

"I hope that the real cold spells are over and that you are not freezing in the house. I wish that the warm

weather would come quickly and that you get a rest from the winter..."

Could she imagine that her second son would become a much more famous personality than her first-born? Could she guess that his name would denote a whole era in history?

A mother always has her own view of her children. For her the most important thing is that he is alive, well, successful. On those rare occasions when Maria Ulyanova saw Vladimir at work, she was always both proud and anxious... "Why does he strain himself so, talk so loudly — it's so harmful," she said once after hearing him speak.

It seems that there was nothing she could have done for him (or her other children, for that matter) which she neglected to do. Because of him she sold their house in Simbirsk and moved to Kazan so that she could provide a home for him while he was at the university. When he was exiled to Siberia she wanted to follow him, but Dmitri's arrest prevented her. When Lenin went abroad he often invited her to come and visit him. And she did. In spite of the distances, the fact that she was getting older and was not so energetic as she had been, she travelled by rail to France, by boat to Sweden...

One evening in April 1917, having returned to Petrograd from his exile abroad, Lenin went to Volkovo cemetery where his mother lay buried beside his sister, Olga. We do not know whether he wept for his dear ones or stood pale, contained, dry-eyed with the searing inner flame of grief in his heart.

Journey into Diamond Country

By Tikhon SYOMUSHKIN

from the book UGRYUN-SEVER

The plane trip from Moscow took seven hours. On our arrival, Yakutsk was waking up to a clear and cloudless day, but though it was April and the sun was shining brightly, spring was taking its time and the air was cold. The River Lena was still frozen a solid two metres thick. This great waterway is unused for six months of the year, and the docks in Yakutsk were idle, too. The tall cranes of the port looked huge and lonely.

Twelve years ago, when I was in Yakutsk last, it was nothing like this. I hardly recognised it now. It had been a town entirely

built of wood — houses, pavements and roadways. Now a main street, Lenin Prospect, asphalt paved and lined with modern blocks of flats, runs through the centre, with other broad avenues lying parallel to it on either side.

That evening I went to see my friend, the writer Nikolai Zolotaryov-Yakutsky, and we talked about the fabulous diamond country of Yakutia. Diamonds, he told me, had been discovered here before the revolution. According to the story, a Yakut reindeer-breeder walking along the River Vilyui picked up a beautiful, translucent stone out

of the water. He held it up to the light, admiring the play of colour. It was almost like a piece of ice, except that it did not melt in your hand. He decided it was pretty enough to show the trader. And he was glad he did, for the trader gave him two full pounds of shag for just that one pretty stone! Funny man — that trader. Or just sharp-eyed — the stone was a diamond!

That diamond eventually got to the international exhibition in Paris. It was named the North Star, weighed 50 carats, and was worth 100,000 gold roubles.

Strangely enough, no rush for diamonds followed their discovery in Siberia. Nature had hidden her treasure so well that their safety was assured — for a long time to come. Just to get to the diamond "fields" you had to go through more than 450 miles of bog and virgin forest, endless forest and bog. The earth was permanently frozen. This was uninhabited, impassable wilderness!

It was not until the latter half of the 1950s that the great development began. A huge tract of wilderness was opened up. The first winter, in frosts that fell to 75 and more degrees Fahrenheit below zero, bulldozers and tractors worked without ever turning off their motors. The virgin forest, deafened by the roar, slowly retreated. Diamond mines appeared, then concentration mills, and towns: Mirny, Aikhal,

Chernyshevsky. The North was changing.

* * *

In the morning, we left Yakutsk for Mirny, 600 miles or so away, and the youngest town in the Yakut Republic. The air route lies through Vilyuisk and the new river port of Lensk, born of the diamond country.

Next to me on the plane was a middle-aged woman, one of the many passengers flying to Mirny. She had left sunny Krasnodar to join her husband who was working near Aikhal, clearing forest.

I asked what had made her decide to exchange that lovely climate for the frozen north.

"My husband says the pay's very good, and we could stick it out for a couple of years."

"So you want to make a few roubles out here."

"Why not? Just a year or two, then we'll go back home again."

She was one of many I heard talking this way. And almost all did go back to the "continent," as people here refer to the European part of the country. But before they knew it, most of them were talking about coming again, this time to stay! As for the generation born in the North, for them it will always be home. No matter where they go, they always seem to return.

Later, speeding through the streets of Mirny, which in a fabulously short time has become the

centre of the diamond country, I learned why it had developed so fast. There was an urgent demand for diamonds in industry, so that town construction was greatly speeded up to accommodate the large number of workers expected.

Mirny began life in tents "inherited" from the geologists who had prospected for the diamond fields. Today, its wide streets are lined with blocks of flats of many colours, an effective brightener for the dreary winter landscape of the north.

The gleaming aluminium walls of the ore-concentration plant stand shining in the sun. Parts of it are still under construction, but it has been in operation since 1965. The same sort of giant plant is to be constructed in Aikhal.

* * *

Aikhal, on the Arctic Circle, has the second largest diamond mines in the area. It stands right in the forest, but the timber can be used only for making small articles, or for fuel, not for building. This is because the roots cannot grow down due to the eternally frozen ground. So they lie horizontally, near the surface, in the upper portion of the ground which thaws out every spring. A stiff wind with snow could easily uproot the whole

forest of stunted trees. But nature protects it. There are no stiff winds out here.

Aikhal is home, at least temporarily, to people of forty nationalities. This is characteristic of many of the big construction sites that attract workers from all parts of the country. The pay is high, an ordinary logger earning up to 400-500 roubles a month.

I arrived in Aikhal in time for the traditional Farewell to Winter festival. Some patches of snow still remained, but the forest had become noticeably greener, and the air was filled with the fragrance of larch. The holiday coincided with the fourth anniversary of the foundation of Aikhal, and on that bright, sunny day, several thousand people were out in the streets, many with babies. No one stayed indoors. After the long Arctic winter people were hungry for entertainment.

A superbly dressed carnival procession was in progress. "Ivan the Fool" stood atop a moving open truck, clowning for an appreciative audience. Next came the "Knights of Aikhal" in armour, high boots and pointed helmets, carrying spears and shields. These were followed by husky Siberians dressed as the Russian giant-heroes of the national epics. It was easy to see what a lot of time, energy, and love had gone into the preparation of this carnival.

The streets were as noisy as a country fair, with accordion music and singing everywhere. A contemporary note was struck when everybody cheered a large model of a spaceship.

In Yakut, the word "aikhal" means "glory." No one knows who thought up this name for the town; Aikhal still lacks most of the comforts of home. It is hundreds of miles from the main highway. Only in the winter, when the bogs are frozen over, are the roads open to cars and trucks.

It was in Aikhal that the idea of building an "insulated" town originated, with blueprints by a young Yakut architect, Georgi Germogenov. When we met, he unfolded his plans, and proceeded to "show me around".

"The new Aikhal residential section is to consist of four main five-storey units," he told me, "with over two thousand square yards of living space in each. Two other buildings will house the school and the administrative offices.

"You will need no fur coat to walk through the town, though the temperature in these parts falls to 76 F. below zero. Suppose we are here in the furthest unit on the fifth floor. We go down to the ground floor and walk 139 yards along the corridor on this floor until we reach the gallery connecting the units. This connecting passage is 13 yards

wide and two storeys high. One side (5 yards wide) is for walking, the other (over 8 yards wide) for little shops, kiosks, and automatic vending machines. It is warm here, with excellent ventilation. Anyone who prefers the outdoors, however, can take his skis and go out the gallery exit.

"Now this is the town centre, two storeys high and about 9,000 square yards in floor space. It includes a cinema seating 400, a post office and telegraph and telephone facilities, a restaurant for 150 people, and shops. Here, too, are a gymnasium, library, chemist's, polyclinic, and savings bank. Here is the wedding pavilion, quite a necessary addition, you'll admit. Now we pass through the insulated gallery to the school, which is designed for 640 pupils. The younger children may safely and happily spend the day at the day nursery. The entire town is intended for a population of five and a half thousand.

"If this experiment proves successful, we can do the same all over the Far North!"

* * *

A little biplane air-taxi shuttles between Mirny and Chernyshevsky, taking off every half hour.

The overland highway is not yet completed here. As in Aikhal,

freight travels only over the frozen winter roads. In summer, the air lift is supplemented by a small fleet of tanks retired from army duty.

Chernyshevsky is the most modern of the towns in the diamond country as regards comforts and amenities. The ten thousand people who live here are from all over the country, as in the rest of the Far North. The fact that there is not one tent left here, however, is due to a great extent to the efforts of the chief engineer of the hydroelectric construction scheme, Batenchuk, a man of tremendous, ebullient energy, very popular in the area. Batenchuk promised to show us his giant "baby", the dam, which was rapidly growing, and also the high-tension lines, which are going up at the same time as the dam.

A "ride" through the dense forest was lined with two rows of pylons.

"That took a lot of doing!" said Batenchuk proudly. "There isn't a road, not even a footpath between here and Aikhal. And not one village along the way. The taiga is grim. It's not for men who can't take it. But those marching off like that make a pretty picture, don't they?"

We inspected the cement-lined gallery and the entire underground kingdom of the future hydroelectric station. Then we stood and gazed at the frozen Vilyui. Its deep silence was some-

how awe-inspiring, contrasting strangely with the far-off explosions of cliff rock being blasted and the nearer roar of tip-up lorries unloading.

There is no doubt that Chernyshevsky will soon be the power centre of the diamond country.

On a visit to the local hospital, I met a young surgeon, Igor Mishchenko, a graduate of the Irkutsk Medical Institute. With sixty operations behind him — all successful — this young doctor already has quite a reputation.

I asked Igor whether he had been sent north by his institute.

"Yes and no," was the answer. "I had been waiting for the opportunity to come north, and that happened to be the assignment I got at the institute."

He led me around the two floors of the hospital, to the shining new maternity ward and the operating theatre, which I was allowed to look at through glass doors. This hospital with its talented staff is another addition to the huge project that is the pride of Batenchuk and his people.

Yes, the Far North is being settled. Men and machines have reached the most inaccessible places, from the Kola Peninsula in the north-west to Chukotka in the north-east. And people are coming to stay, men and their families. The North is a white desert no longer.



Green Methuselahs

by Vassili PESKOV

from the newspaper KOMSOMOLSKAYA PRAVDA

There are some trees in the world known to be as much as 7,000 years old. Since such ancient centres of civilisation as Rome and Samarkand are "only" 2,500 years old, it is clear that these green Methuselahs are deserving of some respect.

The limes, oaks and plane trees are the longest lived of the European trees, and in Lithuania I saw the oldest of all the oaks in Europe. It sprang from the seed about 2,000 years ago.

By a mountain road in Central Asia there is a tea house in the hollow trunk of a vast ancient

tree. Once I saw a similar tree in the Caucasus — with the marvellous climate and fertile soil in this area it is not surprising that everything grows with exuberance. Even so, you stand beneath the plane trees in the village of Achandary and gaze in wonderment. They are enormous, and one can see why once upon a time they were deified.

Some of these giants have even gone down in history, like this gnarled oak (picture top) under whose shady branches the Zaporozhye Cossacks wrote their famous letter to the Sultan of Turkey three hundred years ago.

AN IRON MAN SPEAKS

He's 40 and no longer a competitor. But as a coach he still has to keep a step ahead of his pupils. Merited Master of Sports Rudolph Pluckfelder, a former Olympic weightlifting champion, gives an exclusive interview to journalist Leonid Pleshakov.

from the magazine *SMENA*



Weightlifting is a sport in which man pits his strength against iron. In fact, there is symbolism here: man's muscles must be made of iron if he is to win over real iron. This sport is essentially a struggle against the pull of gravity. But there is also competition against other athletes, athletes who may have lifted a fraction of a kilogram more than you. The will to win is sometimes the deciding factor.

Which is the most important aspect in this struggle — the strength of one's muscles or the strength of one's nerves?

This is my first question to Rudolph Pluckfelder concerning

the psychology of a man's struggle against a metal barbell.

"It goes without saying that when an athlete is actually on the stand, hoisting a weight, it is best if he is calm and in complete control of himself. In fact, he must shut his mind off from the outside world. Both his muscles and nerves should be focussed on one thing — to lift that weight. Nervousness is fatal."

"This means the winner will be a man without any emotions whatsoever, a bunch of muscles and that's all?" I object. "I think that behind outward composure there is a torrent of emotions, and in this the man's nerves play a vital role."

"Well and good. But when a weightlifter trains his body he also trains his spirit. And the main psychological struggle is fought *not* during the actual competition itself."

"Then when is it fought?"

"As soon as a newcomer steps into the gym for the first time. His goal is clear to him — to become strong. Of course, everyone understands this in his own way. Some want to build up their muscles in order to have a better physique than their neighbours, others want to become champions. But all beginners must realise one thing: there is a yawning gap between desire and achievement. One has to have strong willpower in order to train day in and day out, year after year, performing exhaustive drills, monotonous and perhaps at first glance senseless work, because the results are not visible immediately. It takes years before the first rewards are obtained, and not everyone has the patience to wait so long.

"Everyone knows the myth about Milo who in order to become strong began lifting his pet calf every day. As the calf grew so did the youth's strength. In the end he lifted the full-grown bull. Many know this story, but how many athletes are ready to follow this example?"

"And how did your own 'calf' grow? How many years did it take?"

"When I first started hoisting barbells I could press 50 kilo-

grams, snatch 70 and clean and jerk 90. My final results were 155,142 and 182 kilograms. Between these results stretched a period of 12 years."

"But what is the main thing that impels a youth to become a weightlifter? For instance, why did you go in for this sport?"

"My case is not typical. I started in sports quite late — when I was already 22. In fact, I was forced to: I had a heart defect. They advised me to strengthen my heart with physical training. First I took up wrestling, and then in order to build up my strength I tackled the barbell."

"And when you overcame your ailment, why did you continue weightlifting?"

"A new goal appeared before me. It seemed to me that from the point of view of psychology, there is no limit to man's strength and energy. The trick is to develop them. And this is what egged on my curiosity to find out how far I could go — how much I could lift."

"Do others have similar goals?"

"I think so. Yes, quite a few. To win over your opponent is a great feeling, but to win over yourself is even greater satisfaction..."

"But there are other motives which bring a person into competitive sports — for instance, glory and the limelight. One can say that even the most modest person has a sense of vanity."

"Naturally."

A man is about to conquer his own body, to make it do the impossible



"For instance, what did you feel when you won a gold medal in Tokyo?"

"Of course I was happy. My dream had come true. More than anything else I had wanted to become an Olympic champion. Even in Rome, four years earlier, I had hoped to win a medal. But a back injury put me out of the running on that occasion."

The 1964 Tokyo Olympics represent one of the happier moments in the sports life of Pluckfelder: not only did he win a gold medal, but his pupil Alexei Vakhonin also won one. This is unique in the history of the Olympic Games.

"How do you get your pupils interested in sport?"

"I try to convince them that sport means health, that it will give them years of life and temper their willpower."

"What do you consider the most difficult moments in the life of a sportsman?"

"I would say there are two: when he finally reaches the top and when the time comes for him to retire from major competition."

"Why?"

"Because no one prepares him for these two moments. Fame is a very severe test. Laurels weigh heavily upon a champion; in fact, they can break him if he is unable to correctly understand what the laurels actually mean."

"Have you experienced this yourself?"

"No, I was lucky. I was sufficiently mature when sports fame came to me. Life had already taught me to distinguish between achievements of real value and what is transient. Besides that, I grew up among workers. Almost as soon as I began training I started to coach my workmates. We developed together and as I tried to mould them, so I moulded myself. I think this is what protected me from letting sports fame go to my head."

"And what about the second critical moment?"

"It's hard to leave big time sports. It's not only a matter of giving up something you've worked long and hard for. Perhaps some of the glory ash become a bit tarnished, but the habit of being in the limelight remains. On retirement your whole mode of life changes. It is a psychological break; you have to begin all over again, but from what?"

"What is your solution?"

"I think that a sportsman, while he is still at his peak, should begin to prepare himself for the day when he will have to step down. This transition should be gradual and natural. It really doesn't matter what he goes in for, as long as he finds it interesting. I found it best to start coaching. For this too, you have to prepare yourself. It was my good luck that as my competitive career drew to a close I already and

quite a few years of coaching work behind me. More than 20 of my pupils were Masters of Sport."

"Which is more difficult, competing or coaching?"

"The coach has a more difficult job. In addition to the nervous stress of competing, he has additional burdens. A coach watches his pupil compete from the sidelines, but in his heart he is right up there with him and is living through it all — perhaps even more than if he himself were hoisting the barbell. The unrewarding aspect of a coach's work is felt the moment his pupil scores his first victory. As soon as he sets a record the new champ starts teaching his coach. To him this seems natural — after all, he is the champion — and perhaps in the past his coach as a competitor could not even dream of reaching his results.

"This is when a new race begins for the coach. When he was himself competing, he always saw in front of him the back of the opponent ahead, and if he himself was in front he felt an opponent breathing down his neck. In order to hold his position at the top he had to plan ahead for even higher results than the one which brought him victory yesterday.

"The coach faces the same problem. Only this time his opponent is his own pupil. The coach must always keep a step ahead of his pupil. And the difficulty is that you have to prove yourself not on the stand (here

kilograms would prove your point) but in words and by the results obtained by the pupil."

"So that in becoming a coach, an athlete jumps from the frying pan into the fire?"

"Yes, that's probably correct.

But there are also good points about this job. A pupil's victory brings incomparable joy and happiness. When I used to win myself, there was always some kind of residue left in my heart: I had failed to do something just so, I felt I could have done better. But I always forgive my pupil all his mistakes when he wins."

Pluckfelder talks about his achievements as something natural. But a study of his life makes one realise how hard he had to work to get to the top. His



childhood coincided with the war years. In winters he went fishing in cold Siberian rivers and felled timber in the thick forests. At the age of 16 he began working in the mines. After that, he became a lorry-loader, then an electrician. Usually, before taking up weightlifting, a sportsman has to tune up with some less exacting sport. But Rudolph's everyday work had made him so fit that he was able to start right away hoisting barbells.

His ancestors were farmers who migrated to Russia from Germany in the eighteenth century. So it is not surprising that in his approach to weightlifting problems one notes a peasantlike logic — firm and final. He brings to mind the peasant who knows he will not have good yields if he tills his fields poorly, or does not do his sowing properly, or fails to bring in his harvest at the proper time.

Pluckfelder worked out his own method of training, and was able to turn in his best performance at the age of 37. Now, at 40, when he is no longer competing, he is just as trim and fit as ever.

"What are your plans as a coach?"

"I would like to set up my own school, or to be more precise, a sports club. A coach's job is not an easy one. He must always be prepared to face setbacks and disappointments. Happiness comes but rarely. The main feature of a coach should be his principles. And the main condition for work

— independence. By independence I mean the right to experiment, to try new methods, to take a chance. A coach is like an artist who has his own style, his own approach. A club must turn out finished material. It should have the right to enter its pupils in all competitions, including some international ones.

"The present level of weightlifting is so high that the time of the 'wunderkind' has vanished. It is no longer enough to be talented. Long years of hard training are needed before an athlete attains results of international calibre. And one never knows whether he will be able to surpass his peers in the fight for the championship. To develop a weightlifter is not merely difficult — it is extremely difficult. After all, a potential champion (irrespective of whether he does become a champion or not) must live many years according to champion's rigid schedule. He has to limit himself in many things and give up some altogether. Not everyone is capable of this. Only a strong-willed sportsman can reach the top."

Rudolph Pluckfelder, who has spent almost 20 years hoisting barbells, is now writing a book in which he advances his basic ideas on training. There is little doubt that his valuable experiences, when made available through the medium of the printed word, will help to swell the ranks of the nation's iron men.

NO TIME TO FLY TO THE STARS

by Yaroslav GOLOVANOV
from KOMSOMOLSKAYA PRAVDA

Anatoli Zykov worked in a laboratory at the design bureau working on spaceships, and he himself dreamed of making flights into space. But he did not like to talk to other people about it. Well on the way to realising his ambition, he met his death in an accident.

A tall, well-knit youngster, he had a certain gentle irony in his make-up and complete self-assurance — too much, it seemed to many people when they first met him. It is true, of course, that he was quite confident of his own capabilities. In a photograph taken in the Caucasus nine years ago Anatoli Zykov is seen doing a handstand — on one hand only — on some crag, on the very edge of a precipice.

He himself said: "I've been lucky all my life. Of course, I've given back a helping hand now and again." He also said that a man — if he were really a Man — could do anything, for man's potentialities,

physical or mental, were inexhaustible. What gave him that conviction? He learned a great deal from the example of his own parents, well-balanced, reliable working folks, who always depended on their own efforts, above all else, who never sought help from anyone and never tried to shelter behind anyone else. So he was also lucky in having such parents.

Anatoli Zykov did very well at school, at Ulyanovsk, on the Volga, and finished with a gold medal. He did not hesitate for a moment, for he had his plans made well in advance, and immediately put in his application to enter the Moscow

Aviation Institute (MAI), where there was great competition to get in and many disappointed applicants. According to hallowed tradition, at the entrance examinations to MAI they would find out absolutely everything you knew, everything you had managed to absorb in school and elsewhere, and the extent of your desire for knowledge.

Zykov was accepted, and there he continued to study well, although in his own particular way. He acquired knowledge not so much by a desire to know everything as to get a thorough understanding of everything that was said.

Jumping for Joy

He was always asking questions at the lectures, more often than anyone else. Afterwards, bent over his notebooks, he would go over everything he had heard at the lecture. And if he felt that things were not as clear as he would like them to be he would persistently go on asking questions. He knew that this did not please all the lecturers, but he did it all the time, right until he finished the institute.

In Ulyanovsk he was the favourite of the school, the school hero. And in Moscow, too, at the Institute, many people gravitated to him although he by no means aspired to the role of leader or moving spirit of society. But with him people felt calm and confident and really did believe that man could "do anything" even in the most unfavourable circumstances.

Anatoli Zykov often won sporting

laurels, too. He was the institute gymnastics champion, was a fine volleyball and basketball player, and a good skier and mountain climber.

There was no element of showing off in his sporting achievements. He himself simply liked to be strong and agile. Once during the New Year celebrations, when he was with a group of students, he went into an empty room with a fellow student and the two of them turned endless somersaults — and laughed for joy. It was simply good to know that they could do it — it was not essential to demonstrate the fact in public.

People liked Zykov, although they knew that he could suddenly become very severe and "stand on principle". Victor Sorokin, who was Zykov's best friend and was in his group at the Institute, recalls: "He never forgave anyone for deliberately trying to gain success at someone else's expense, or for evading some unpleasant obligation. It didn't matter how friendly he might be with the other person, he would strongly condemn actions which he considered wrong and unjust."

Zykov did not live to see his thirtieth birthday. Sorokin is still alive and he speaks now of his friend as of a younger brother: "In his youth he was extremely intolerant of weaknesses; all misfits, whiners, square pegs in round holes irritated him, aroused a kind of squeamish aversion. He was frequently unjustly severe, demanding of others what he demanded of himself, and he did not have enough experience of life to understand the

his own criteria were not suitable for everyone. I think he was gradually beginning to realise this and to soften somewhat — especially after his marriage..."

He was a persevering young man who was able to carry his intentions through to their conclusion. That is how it was with his dream of space flight.

At the end of the fifties many people in the Soviet Union were fascinated by Ivan Yefremov's recently published science fiction novel, *Andromeda*. Its publication was very timely. In autumn 1957 the first two artificial earth satellites were launched into near-Earth space. Real life was catching up with fiction. Newspaper reports of the flights of these satellites were couched in the language of the characters in *Andromeda*.

It was that autumn that first-year student Anatoli Zykov began to think of the cosmos as a sphere in which to apply his own energy and knowledge. Anyone could dream of becoming a cosmonaut, of course. But in spring, 1961, when Zykov was in his fourth year the first spaceman went up — an ordinary looking young man named Yuri Gagarin, an air force pilot, five years older than Zykov. Then Zykov's dream acquired the clear features of a life programme.

From his work in the students' scientific and technical society he derived as much pleasure as a five-year-old from a new clockwork toy. In the society he read papers on the theory of probability and built a cybernetic machine which played noughts

and crosses. When he did his practical work in a factory he designed a fundamentally new type of machine-tool with programme control and original electro-magnetic couplings, with it winning the institute competition for student work.

When Zykov left the institute he had the invitation to work "in the cosmos" in his pocket. Here, of course, there was an element of the usual Zykov luck.

With the Rocket Men

Rocket specialists are rather stern types. They show no pity for greenhorn engineers. Judge for yourself: the programme is a strenuous one, of vital importance to the state, and along comes a raw graduate, who has not the faintest idea of what is ahead of him; he fumbles and stumbles like a blind kitten into all sorts of things that don't concern him, keeps pestering people with questions and then suddenly shuts up and does not say a word even when one of the old hands is talking obvious nonsense.

Zykov was not like the other novices. He had to get used to the work bit by bit, but was not timid. He immediately behaved in such a way that everyone felt that he was an equal among equals. Although in his assertion of himself as an individual worthy of respect there was no ostentation, but on the contrary, considerable delicacy, many people did not like the newcomer at all to begin with. He broke the ice of prejudice with his constant cheerful-

ness and sociability. And his sportsmanship, in the broad sense of the word.

Many people thought Zykov was queer — he was already bringing dumb-bells, weights and an expander to work. He fixed up a thermometer on the wall and once every couple of hours did a few physical jerks. Before long he convinced others that this was excellent for the health. It was not even a month before all the youngsters in the laboratory acknowledged Zykov to be their leader. Everyone soon realized that he was a business like individual, a young man who was active to some purpose and not just for show. Technologists do not like idle chatters and smiling fools.

I spoke with people among whom Anatoli Zykov worked. "I never saw him downcast, or dispirited. He never talked about his failures or disappointments, although of course he had them." "He never laughed at mistakes made by people who were talking to him, he respected the opinions of others, but he tenaciously upheld his own. When people showed him where he was incorrect, he snorted, for he did not like to be wrong." "He spoke very good, correct Russian. He loved and knew his native tongue, he was proud to be Russian." "He never forgot to wish people a happy birthday. And if there was a wedding or somebody's first baby was born, there was a great to-do! He was the life and soul of any party."

It might sound as though Anatoli Zykov was always dashing about, brimming over with energy, that you

only had to call him and he would come running. But that was not the case. He did not waste time on trifles, he chose to do those things which called for the maximum effort and produced the maximum effect. He is in fact remembered for his work on substantial undertakings.

For example, he played a direct part in the developing and testing of a number of complex groups of electronic instruments to check on the functioning of rocket engines. With some colleagues he wrote an article which was of great technological importance on the synthesis of filters. Zykov realised that the knowledge he had gained at the Institute would soon be insufficient. He entered the faculty for further engineering training and completed the course successfully.

On June 11, 1966 he put in his application to join the cosmonauts' unit. They accepted it, confident that he was really made of the right stuff. But at the bottom they wrote in pencil: "Height!!!" Anatoli Zykov really was a tall young man and so far there was no one as tall as that among the cosmonauts. They told him he would have to wait.

He waited, and he was confident that he could wait as long as he had to.

Learning to Fly

Back in 1963 he decided that he should undergo some basic flying training, as this would be useful to a cosmonaut. The flying club he went to was unfortunately only just establishing itself, and this was not

altogether a happy choice for someone who wanted to fly.

"I want to learn to fly. Surname Zykov, profession engineer." This was how he briefly introduced himself at the club's headquarters. They explained that there was no flying going on as yet, things were still being got ready.

He helped to build living quarters at the airfield, sawed timber with a circular saw, dug the earth, fetched and carried. He did not tell a soul that he wanted to become a cosmonaut. Only once, late in the evening, when he and Marat Zyabin, the club chief, were waiting by the road for a car, did Anatoli Zykov suddenly say as he looked at the stars: "How wonderful to be up there..." And that was all.

A year later, in June 1964, he went up. He flew Soviet and Czech gliders. At the same time he did some parachute jumping — altogether 27 jumps.

He could never fly enough, he was always eager to go up again. "He was tremendously enthusiastic," the chairman of the flying club council said. At the first opportunity he would get on his motorbike and speed off to the airfield about 80 miles from his home. He spent not only Saturdays and Sundays there but other free days too. "I have a working plan for the week," he explained to his friends. "I work ten hours a day instead of seven and I finish my plan a couple of days earlier. Then I go to the chief, give him my work and ask him to let me go off to the airfield."

Although he was still a very junior engineer the leadership had such confidence in him that they were willing to stretch the usual regulations for him.

Anatoli Zykov loved to dance. He took lessons, and danced quite professionally, once even performing at the Palace of Congresses. He liked the restrained and stately minuet, the whirling waltz and the gay mazurka. But he was upset because he could not manage the twist and applied himself with energy to learn to do jive and the shake. I saw a brief film made by an amateur at the wedding of two of his friends. Anatoli Zykov appears in a few shots — for no more than 15 seconds altogether, but even from that one can see how beautifully he moved and even stood.

I Love You

For an amateur concert once Anatoli spent some days practising ball-room dances. His partner was a girl called Nina. Their dance was the best number on the programme and people in the audience said: "That's a real pair!" The comment was prophetic. On the first anniversary after they met Anatoli Zykov told Nina: "I shall probably never be able to get out the words 'I love you'. To my mind, these are very special words and people use them so often that they have lost their meaning."

All the same he said these words to her. One night he got up onto the roof of a small house so that he was

just beneath her windows and in the dark crawled about the roof painting something in huge white letters. In the morning Nina went to the window and read: I LOVE YOU!

What a wedding it was! There was a succession of witty toasts (those rocket men really put in everything they had into it), and there was a whole impromptu concert. The highlight of the evening, of course, was when the young newlyweds danced a waltz with radiant, happy faces.

Nina Zykova told me something about her husband: "He taught me parachute jumping... When I was doing my examination at MAI he was more worried than I was, and gave me a great deal of help... He and I used to run a dancing class at a school... At every holiday he wanted to give everyone presents, if only little things. He knew how much such small pleasures meant to people... My birthday is in the winter, but every time he brought me a fresh camelia. I always asked him where he got it from, but he would laugh and refuse to tell me... He was very moved when he heard Russian folk songs..."

In 1980 Anatoli Zykov gave up spirits of any kind. Completely. He did not advertise the fact and did not carry on a loud campaign against drunkenness. But at parties he stuck to a couple of glasses of dry wine. When his son Mishka was born, however, he got drunk, kissed everybody and walked down the fire escape from the third floor to the ground on his hands.

In the morning he rushed to the

nursing home, dashed off some affectionate nonsense to his wife in a drunken scrawl and drew three people on the note — two big ones and a little one in between.

He loved his son dearly and devoted every spare moment to him, constructing an electrical machine with remote control to rock the baby in its pram, recording his first cries on the tape recorder, playing with him and trying to teach him all sorts of things as soon as he was about a week old. After the birth of his son he became less severe, more composed. He often thought about things which had not concerned him previously. He told one of his friends: "You know, I had a dream in which I realised what is the purpose of life. I understood why the birds fly, why there are seas, and what is the purpose of people upon the earth. It's all so elementary and simple — and it was all made clear to me."

Zykov went off on a training flight — one of a series of such flights — in a brand new Czech glider. There was the usual exchange: "Number 38 reporting ready for flight, may I take off?" "Talkie off number 58..." He saw the grass bending beneath the machine towing him across the field, then the plane started up, and soon the earth was rapidly receding below him.

The Last Flight

At about 2,500 feet he reported that he had separated from the plane, and then he made for the

nearest cloud. In a cloud there was usually an ascending air current, but the sky was particularly overcast that day, and Zykov felt that the cloud would not "hold him". He headed for another, found an ascending current and began to spiral upwards. He gained height but the airstream was weak and he soon found that he was revolving at one and the same height.

Losing altitude, he went into another cloud, but there was no upward current in it. It would have been better at that point to return to the airfield, but in the hope that he could still find a good current he went further and further. He was out of luck, however, and his height was not enough to get him back to base.

Then he decided to land. There was nothing really dangerous in such an operation — it was simply unpleasant. The glider would have to be towed back. For a good glider pilot it was child's play, and he was already a good one.

Below him were wheat fields, and he knew that the tall stalks could slice off the tail unit of the new glider. He scanned the ground for stubble. At the end of one field stood a little tree, then came a ravine and beyond that a field of clover, with trees growing here and there. Clover fields make ideal landing places, and he decided he had to keep going until he reached it.

He did. But as he approached, he saw that it was not clover, but tall green oats. The oats extended to a ravine, and on the other side of

that was stubble. So he had to fly over the ravine.

Tragically, his height was insufficient to get him over the trees amidst the oats, and he did not have the speed to rise.

A protruding branch impaled the glider, penetrating its fragile covering, smashing Anatoli Zykov's hip and breaking his right leg.

How he managed to open the hatch, clamber out of the cabin and slide down the tree trunk to the ground is unimaginable. First children, then women, came running from the hamlet nearby, but were powerless to help. He asked them to use his radio to get a message to the airfield, but the radio was smashed.

"Don't cry," he begged the women, who were weeping in their helplessness.

Before the doctor they had sent for from the next village could arrive, it began to rain. They covered Anatoli to keep him dry and warm, but it was of no avail. Within a short time he died.

The rocket men buried Anatoli Zykov on a cloudless, sunny day. Many of them cried. But his mother had no tears left. All she could say was: "Look, son, what wonderful flying weather it is today..."

Anatoli Zykov was not a member of the cosmonauts' unit. But I am sure of one thing. He would have been. By his entire short life he had earned this honour, and that is why I should like to call him ANATOLI ZYKOV, COSMONAUT. He simply hadn't time. The main thing is that it was within his power.

LOVE AMONG THE SEALS

by Mikhail KOROSTYLYOV

from the magazine *NAUKA I TEKHNIKA* (Science and Engineering)



Patriarch of the
breeding ground.
His domain is well
populated in August —
like an, good bear —
this time of year.



Seals are such placid creatures. True or false?

A visit to the tiny island of Tyuleni (Seal Island) — less than half a mile long, — in May or June would prove otherwise. As long as you were neither seen nor heard.

Seals engage in a most boisterous, even savage courtship and mating. There are three herds in Soviet waters, and one of them visits Tyuleni Island, in the south of the Sea of Okhotsk, each year

Japan and never go near the land. They move around individually or in small groups, for this gives them a better chance of catching food and also of remaining unnoticed by predators. They are expert swimmers and divers and they can move on land too. Tucking in their back flippers they can run fast and even climb very steep rocks. In their amazingly varied life and their strange ways there are many enigmas. No one knows how the



Mother is happy but tired, new-born infant smugly pleased with his part in the proceedings.

for this energetic procreation period. The other two go to the Commander Islands and the Kuriles.

During the winter the seals live in the open sea off the coast of

seals find their way back to the tiny island year after year or why for centuries they have made this dot in the boundless ocean their breeding ground.

The seal rookery, as the breeding ground is called, looks quite chaotic, but actually the seals are very highly disciplined and extremely well organised.

As soon as the ice recedes the adult males, the bulls, land on the shore of the island and stake out their claims for positions on the pebbly beach. There are some tough fights among them to decide who will be master of the harems which are established later when the females arrive. The males prepare for this contest throughout the winter — eating a great deal and storing up strength and energy.

Building up the Harems

The masters of the harems are easily identified. They are huge beasts, up to six feet or more in length and weighing as much as 450 lbs. They have small stiff manes and white whiskers.

Usually by the middle of May the rookery has been well settled by the bulls, the future fathers of large families, and at this time they rest and recuperate after their long trip. They eat practically nothing and lie motionless for days with their muzzles buried in the sand, looking from the distance like bears because of their brown colouring. Quiet most of the time, they occasionally frighten their neighbours with strange guttural cries. The latecomers and those who lack the strength and determination to fight for a place on land, lie in the shallows watching, and ready to rush ashore should a bull leave his place. But they wait for a long time. Few bulls risk losing their places and they seldom make for the water.

Soon after the bulls arrive, the young immature male seals swim up to the island. They are not ready for breeding until they are over the age of four and the immature male looks rather like the female in size and colouring, weighing about 135 lbs and having a thick light brown fur undercoat and long, coarser hairs of greyish-brown. Before the coming of the females, these youngsters are allowed on to the warm stones. They play around



Lonely heart gazing out to sea for a mate who hasn't turned up — or just drying in the sun after a dip?

among the bulls, wrestling and tumbling and imitating the titanic struggles of their elders. But when the females arrive they are banished to separate bachelors'

quarters on the rocky capes of the island.

Early in June the females arrive, singly or in small groups. Life on the rookery changes immediately. The bulls become excited, jealous and aggressive. They indulge in all sorts of tricks to assemble their harems — tender

Family council — Dad always has the last word, and he won't stand for any argument.



sighs, furious roars and even a nip from their sharp teeth.

On landing, the females come into the possession of the bulls who have staked out claims right on the water front. They stay with these bulls for a short time, then try to move on, with the result that the infuriated bulls try to block their way.

The determined bull puffs and blows, shakes his head and lets out powerful roars. If the female persists he grabs her with his teeth

and tries to hurl her under his flippers. The bulls try to steal each others' females and sometimes these poor creatures are torn apart by two males. This takes place when the females first appear. Once they have all reached the rookery things settle down and after a few days the females choose their own places without any interference. Some people believe that the female seals return to the same bull each year.

Starting a Family

The seal cubs are usually born from two to five days after the females arrive in the rookery. (A female gives birth to one cub.) They look rather like puppies, with flippers instead of legs. Their mothers stay with the cubs for the first few days, but soon they swim out to hunt for food.

From mid-July the rookery teems with activity. It is the breeding season and tempers are high. Woe betide a male, who thirsty and tired leaves his harem to dive into the water and freshen up after his marital labours. Some brave fellow will try and occupy his place. Taking big leaps through the crowded harems and wagging his head in a curious manner as if to indicate his peaceful intentions, he tries to make his way through. Angry neighbours rush upon the newcomer, attacking him with tooth and flipper, and he has to fight for his place. If he seems tough enough to defend himself

the neighbours turn to some less valiant squatter and drive him off in disgrace. Sometimes baby seals are injured in these fights; the giant bulls forget them and crush them beneath their flailing flippers. Fortunately, nature has anticipated the danger for, about two weeks after birth, the young cubs move to safer areas and keep huddled together for warmth. The females call their babies with shrill cries and by sniffing around can find their own among the



Who said that all seals look alike? Not really, to judge from the almost human character above and the appealing doggy seal below.



thousands of little ones. How they do it is a mystery.

Annihilation Averted

Once the cubs have had their fill of the fat milk, they sleep most of the time, and they sleep very soundly. They can be picked up without waking them. The cry of the cubs is rather like the thin bleating of a lamb, and when they are frightened they give a peculiar snort.

Most of the animals gambol in the shallows near the shore on the few warm sunny days, the females swimming along near their own bulls. After sunset it is bachelors' time. They chase each other through the water and leap high out of the water like dolphins without making a single splash.

The cubs take their first swimming lessons in a shallow lagoon towards the end of July. They are clumsy at first, and flap their flippers in a funny way, but they learn quickly and, helped by instinct they soon become quite expert.

Once the mating season is over the exhausted males go out to sea to hunt for food and the harems break up. The males who have hitherto been unable to find a place in the sun then come into the rookery.

The seals shed their coats in the autumn and the cubs' fur

turns a silvery-grey. The adult animals become fearful and stay on shore until late autumn, when they all swim south in small groups.

The female's coat is usually greyish-brown and her breasts almost yellow, although sometimes she may have an almost ashen or blue coat.

These days only males from three to five years old are killed for fur. In the past the seal colonies were almost wiped out by barbarous indiscriminate destruction by hunters from many countries. At one time there were only a few hundred animals left on Tyuleni Island. Now hunting seals is strictly controlled by a convention signed by the Soviet Union, the United States of America, Canada and Japan and the animals are killed only according to a scientifically worked-out plan. The Tyuleni Island herd has greatly increased as a result, and is growing in numbers every year.

The seals are hunted in June and July before they shed their coats. In pre-dawn raids, the hunters creep up to the seals lying on the rocky capes and cut them off from the sea. They drive them into a stockade and there make the approved kill. The pelts are degreased and preserved and sent to fur factories where the long coarse hair is removed and the soft undercoat dyed brown or black.



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THE PROF GOES INTO SHIPPING

by Vladimir SHIN

from the newspaper
KOMMUNISTSKAYA PRAVDA

It made me quite dizzy to look at the map with its myriad black dots scattered about the oceans of the world, marking the positions of ships at that particular day and hour. With me was the Minister of the Merchant Fleet of the USSR, Victor Bakayev, D.Sc. (Tech.)

I put my first question to him.

You have been Minister for 15 years. What led to your appointment?

It all began with the blue waters of the Azov Sea, the southern sun, tarred feluccas, the strong hands of the fishermen and the port workers. In autumn 1913 I went to work at the Berdyansk port workshop as an apprentice. I had to clean the seaweed and barnacles off the boat, and heat up the rivets for the boiler-makers on a foot-operated burner. My earnings were a great help to our family with its many mouths to feed. My father was a turner, and my mother had eight children to bring up. She went out

scrubbing floors, and doing washing and ironing. We lived in sheds and outhouses and wandered from one landlady to another.

But my memories of childhood are not only bitter ones. More often than not others come to mind: a little sailing boat, laden with melons, water melons, tomatoes and subergines. The older ones used to take us with them when they went from Berdyansk to Kerch, both of them southern ports. I would sit at the tiller, and the sail would fly into the deep blue sky...

That was how my connection with the sea began.

After the revolution I was a sailor

on various kinds of ships and then I became a Communist. Later I went through a school for workers, then on to the Moscow Institute of Transport Engineers, and began to do engineering and scientific work connected with shipping; I worked for the Ministry of the Merchant Fleet and eventually presented my doctor's thesis.

What was your reaction when you were asked to become Minister?

I spent quite a bit of time thinking about the qualities necessary in a Soviet Minister.

It is very important for a minister to be able to organise his working time. There is a fantastic torrent of questions which have to be considered and decided, one has to go to various conferences and meetings and receive people — all this overwhelms one. Every day the plans and possibilities of the Minister come into conflict and, unfortunately, he does not always manage to do all the things he intended to do.

You try not to let the current submerge you and endeavour to control events, to subordinate them to your plans.

A Minister has a vast range of work: questions of an international character, administrative problems and all manner of questions relating to the life and work of the seamen.

Do you ever meet your opposite numbers from other countries?

Quite often as far as the Ministers

of socialist countries are concerned but I see my Western colleagues less often. Frequently the reasons are of an objective nature. There are some rather curious instances, The USSR Ministry of the Merchant Fleet has invited three Italian Ministers to visit the USSR. Not one of them has managed to come, since the cabinets keep changing

How did your appointment affect your personal life?

First of all, there was no more peace for me. To be a Minister in such a constantly operating industry as transport demands practically round-the-clock attention.

Second, my life became far richer, my horizons broadened. At my house the fresh winds of the seas, oceans, far-away islands and continents are frequent guests, brought by my friends the seamen.

Another thing is that my earnings dropped, because as a doctor of technical sciences I had the same salary as a Minister, since I was head of a department and gave lectures. Furthermore, in the summer I had six-eight weeks holiday, whereas a Minister gets only the usual month. As a specialist I could also earn extra money because I was often called in for consultations. When I became Minister I could no longer do such work.

Third, because a Minister is so busy I had to drop my research work, to which I had hoped to devote all my time.

Do you find it a burdensome job being Minister?

It doesn't enter my head. I must confess that the job of Minister gives me an opportunity to put into practice all the scientific theories about the development of the country's merchant fleet on which I was previously working. I am carrying out a cherished wish.

All this gives me great happiness.

What were reactions abroad to the idea of setting up a large Soviet merchant fleet?

There were reactions. And at times quite categorical ones. In 1956 I headed the Soviet delegation to an international shipping congress in London. At the Palace of Westminster I had a meeting with Churchill. The Prime Minister greeted me like a colleague and said that he had worked aboard ship himself quite a bit.

"You're the Minister," he said, "who wants to make Russia a sea power, then? What is your profession?"

"You might call me an old sea wolf too. From the age of 11 my life has been linked with the sea," I replied.

"There's no sense in building up a fleet in Russia. It's a land power."

I objected, saying that the USSR had extremely long sea coasts, that its economy could not develop without a merchant fleet. That was why we were going to build ships.

In 1968 I was the guest of the

British Government at the invitation of Harold Wilson, the Prime Minister. I asked whether a trip to Stratford, Shakespeare's birthplace, could be arranged one Sunday. On the way we stopped by Churchill's grave. As we arrived at the village cemetery in Bladon, where Churchill was buried at his own request, we were greeted by British newspaper reporters. They asked me whether I had ever met Churchill. I told them I had, and now I was sorry that the late Prime Minister could not see for himself that he had been wrong about the development of Soviet shipping.

Which of the ships' captains do you know personally? And which of them would you single out for special mention?

There's not one captain in the fleet who has not been in this office. The Board of the Ministry confirms the appointment of each captain, so I have met every single one of them. It's very hard to pick out any particular one from such a vast number of captains as we have, just as it is impossible to say which is the best of our 45,000 seamen who sail to foreign waters. All I can say is that we have a staggering number of captains, navigators, mechanics and sailors with very high qualifications.

Do any dramatic moments crop up in your work? What is the element of risk?

There are, of course, dramatic

moments. Our efforts for technical progress have not always gone smoothly. I remember that there was particular trouble when we had to decide on the scientific and technological trend that would prevail in our ship design. Suddenly some of our scientific workers came out with erroneous views on speed and tonnage. I can say "erroneous", now, because everybody is convinced of it by this time. But then all the "scientific" arguments were put forward: on grounds of economy, that is owing to the lower capital costs involved, it was claimed necessary to build ships with a speed of 12-14 knots, or at the most 16, no more. A great deal of effort went into all kinds of refutations, proofs and analyses... My friends warned me that my position was in jeopardy. Now the country has a fleet with a total carrying capacity of 13 million tons. What would have happened if our fleet had been slow-moving and behind the times from the technical point of view? Fortunately this is not so.

There is one more thing. About two years ago a slim young girl stood on this spot and wept. I took her by the hand and sat her in the armchair. It turned out that Svetlana Machikhina, that was her name, wanted to be a captain on a long-distance vessel. From childhood she had dreamed about the sea, had done very well at school, had a good knowledge of English, and since she was fifteen had been a member of the Moscow Club for Young Sailors; she had done a period of practical training on board their

ships and all kinds of practical work.

They do not accept girls at seamen's training schools. But why not? Why shouldn't a woman have a higher education in this field? Perhaps this rule will be abandoned in time... In that case I had to make an exception. There were more than enough opponents of my decision, but I decided to stand my ground, and I even issued an order: that Svetlana Machikhina was to be allowed to sit for the entrance examination, that she should be examined with the utmost strictness, and if she passed she should be admitted to a school. Svetlana was accepted by the Odessa Higher Engineering Maritime Training School.

Have any of your children decided on careers connected with the sea?

I have three sons and a daughter: Vladimir, Yuri, Sergei and Ludmilla. They have all gone in for purely "dry land" concerns: atoms, lasers, and economics. So up till now there is no one to carry on the tradition in our family. The only hope is the grandchildren.

Have you succeeded in everything in your life?

Not everything. For example, my passion is books, particularly those on history of the fleet. I have some really unique editions in my library. But I am still searching for more...

Of course I have not succeeded in doing everything I want to do. But my life is not over yet.

For many centuries the vast areas of the north-eastern part of the Asian continent remained unknown to the civilised peoples of both Europe and Asia. Discovery of the Far Eastern lands belongs to the Russians. Yermak Timofeyevich and his Cossacks were the first to cross the Urals. Numerous expeditions followed, and Ivan Moskvitin's detachment first saw the Sea of Okhotsk in 1639.

The wooden fortress built at Yakutsk was the main centre for explorers heading north to the Arctic, or to the Bering and Okhotsk seas, or south to the Amur Basin.

One hot day in July 1646 the Yakutsk cannon boomed to announce the return of Vassili Poyarkov and his Cossacks, who had been travelling through the wild lands to the South for three years, and had made the first voyage along the River Amur to its mouth, where it empties into the Sea of Okhotsk.

This article by Alexei Stadnichenko, M.Sc. (Geography) is about Poyarkov's expedition and the Russian colonisation of the Far East. The author was born and brought up on the shores of the Pacific and has done a great deal of research into the history of the region.

From Russian History

Russians and the Far East

by Alexei STADNICHENKO
from the weekly NEDEL'YA

Some historians hold the view that the driving force behind Russian expansion to the East was the lure of precious furs. I do not agree.

Furs there were in abundance, and many of the immigrants became hunters and trappers. But the basic reason for the Russian peasant to flee eastward was the desire to escape from czarist feudalism and live a free life. As civilisation crept after him he would again head east to maintain his freedom.

Since the time of Yermak Timofeyevich's Siberian campaign in the 1580s and especially after the accession of Mikhail Romanov to the throne in 1613, two factors accelerated the Russian drive to the east through Siberia: peasants running off to escape oppressive feudal laws, and the desire of the Russian government to bring all of grim and frosty Siberia under control of the czar.

Russian settlements began to spring up around ostroms (wooden fortresses built in frontier regions). These settlements gradually grew into towns, despite the harsh climate which made living conditions extremely difficult. In the first decade of the seventeenth century the principal Siberian centre was Tobolsk, but in 1632 the centre was transferred to Yakutsk on the River Lena. It was from there that Yelisei Buza came down to the estuary of the Lena in 1636, that Mikhail Stadukhin set up the Lower Kolyma winter settlement

in 1644 and that Vassili Poyarkov made his trip down the River Amur. These events all took place during the reign of the first Romanov (1613-45).

The eastward movement of the Russians included, along with peasants, fur traders, explorers and military men, many members of religious sects. These religious dissenters were also escaping from feudal oppression.

In European Russia there was a steady deterioration in the position of the peasants, who were being forced into serfdom. But there was no serfdom in the wild, free communities of Siberia, nor in the lands along the River Amur. And when the czar began to exile malcontents to Siberia, the presence of these free-thinkers helped to strengthen the independent, anti-feudal attitude of settlers in the new territories.

Cossacks and Manchus

Poyarkov's expedition reached the Amur Basin from Yakutsk by travelling along the Lena and Aldan rivers, crossing the Stanovoi Range, descending the Zeya to the place where it flows into the Amur. It had been a difficult journey as the winter of 1643-44 was extremely cold. The Cossacks proceeded down the Amur to its mouth, crossed the stormy Sea of Okhotsk in frail boats and spent the winter at a station by the mouth of the River Uliya — a station that had been constructed by Cossacks of Moskvitin's party some years earlier.

In the spring Poyarkov's group crossed the rocky Jugjur Range, and went down the River Mai by rowing boat to Yakutsk. Of the 132 men who started out, only half returned. Such a heavy death toll was not regarded as exceptional in those days.

Poyarkov's name was subsequently given to a Cossack stanitsa (now the village of Poyarkovo). During his wanderings Poyarkov had met tribes of Evenks, Nivkhis, Nanais and Udeghés, members of the small Tungusic-Manchurian language group.

The Great Wall of China, embracing ancient China proper, lay far to the south of the River Amur. Built in the reign of Shih Huang-ti, who unified the country into the world's first totalitarian state in 221 B.C., the Great Wall stretched from Kansu to the Manchurian coast and was designed to keep out the Turkish Hsiung-nu or Huns.

The Manchus, who had expelled the Chinese from the Liao Basin in 1621 and proclaimed the imperial Ta Ching dynasty at Mukden in 1639, entered Peking by surprise in 1644, after the last Ming emperor hanged himself when a bandit named Li Tzu-cheng seized the city. The Manchus helped to drive out Li, crushed Ming resistance and set up the Ching dynasty, which lasted until the 1911 Revolution. It was with these Manchus that Russians had to deal in the Amur Basin several decades later.

Following Poyarkov an expedition under Yerofei Khabarov came to the Amur in the early 1650s. A small group under the command of Nagiba repeated Poyarkov's voyage to the Sea of Okhotsk. Russians began to gradually open up and develop the lands along the Amur.

In the 60s and 70s the Amur was populated largely by Cossacks headed by a certain Chernigovsky, who had fled there after murdering the voivode (leader) in Kilim. He helped develop grain-growing in the district and sought a pardon from the Moscow authorities. This was granted in 1672 but Chernigovsky was not named administrator of the region, as he had hoped. That post went to Ivan Oskolkov, sent from Tobolsk to administer the region which had become an outpost of czarist Russia. Under his guidance fortresses and settlements were built in the Amur Basin, and the Albasin Monastery was founded to consolidate traditional Russian customs.

Busy as they were with their military campaigns to destroy Han resistance in China, the Manchus made no serious attempt at this time to turn northward to the Amur. The Ching dynasty wanted to keep the Manchus pure and retain Manchuria as a hunting preserve, so they fenced off their homeland with the so-called Willow Stockade and refused to allow the Hans to settle there and farm. The Chinese were also barred from serving in

the Manchu "eight-banner" army. (The Manchu "eight-banner" army had its beginning in 1615, when Nurachi, ruler of Manchuria, organized a group of Tungus tribes in eastern Manchuria under eight banners. The banners were yellow, red, blue and white, and some had fringes).

After the last Han resistance had been destroyed the Manchus turned their attention to the Amur region. Several Russian settlements were burned down, but when the Manchus left, the Russians quickly resettled and rebuilt their villages. In July 1685 a Manchu force of 13,500 attacked the Albasin fortress, defended by only 450 men under the command of Cossack Lieutenant Alexei Tolbusin. A shortage of food and ammunition forced the defenders to negotiate an unhampered retreat to Nerchinsk, where the River Nercha empties into the Shilka, a left tributary of the Amur.

The Manchu soldiers demolished villages, whose inhabitants fled to the dense forests. But the invaders did not destroy the crops, so when they left Tolbusin's forces were able to return and help the peasants harvest their grain. The garrison at Albasin was increased to 677 soldiers.

The Nerchinsk Treaty

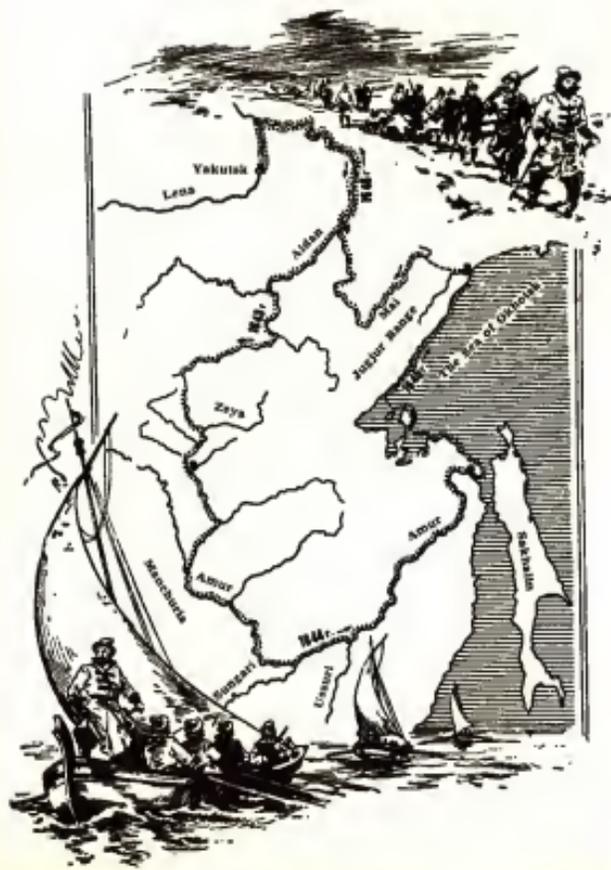
The staunch resistance put up by the Russians on the Amur angered the Manchus. They prepared another "eight-banner"

army to launch a large-scale attack in 1689.

However, the battle never took place, for negotiations between the Manchus and a Moscow envoy Golovin were held near Nerchinsk. Under pressure of the superior forces of the enemy Golovin had to sign the Nerchinsk Treaty in August 1689, under which the Russians agreed to abandon Albasin and territory along the Amur. The treaty was written in Manchu, Russian and Latin, as the Chinese language had not yet been widely accepted at the Ching court.

Russia was torn internally during this period by a power struggle between two boyar groupings (one supporting the under-age czar Ivan and another the young czar Peter — the future Peter the Great). On the other hand, the Ching dynasty was at the height of its power and glory. Manchu diplomats could, and did, apply great pressure at the Nerchinsk negotiations. When Russo-Chinese trade was discussed they rejected the Russian proposal to conduct trade via Nerchinsk or some other place on the River Shilka, and insisted that it be carried on through Kyakhta. That is, they barred travel through Manchuria and said all caravans must go via Mongolia. As for the Amur region, they wanted it kept as a no man's land and part of their vast hunting preserve.

Years passed. The Russian population in Transbaikal regions,



particularly in the Nerchinsk territory along the Shilka, gradually stepped up economic activity, establishing contacts and trade with local tribes. Although the Nerchinsk Treaty closed their natural outlet to the Pacific Ocean via the Amur, Russians settled on the coast of the Sea of Okhotsk, in Kamchatka, the Kurile and Aleutian Islands and Alaska in the eighteenth and early nineteenth centuries.

Towns and settlements sprang up, rough roads were constructed and ships were built. But the rigging for Russian ships built at Okhotsk had to be brought from Yakutsk on horseback through the taiga. It was very difficult to transport food and other basic necessities to the Pacific coast, and the Russians, Aleuts and other peoples living there suffered from acute shortages. Famines were not unknown. In the early nineteenth century Russians began round-the-world sea voyages, but due to a shortage of ships and the length of these trips the requirements of the growing population of Russian possessions on the Pacific coast could not be satisfied. In this situation, demands for a review of the terms of the Nerchinsk Treaty forced on Russia by the Manchus and for the Amur to be opened for navigation began to be voiced all over Russia.

The Nevelskoi Expedition

By the middle of the nineteenth century the political rela-

tions between the Western powers and Russia in regard to the latter's possessions on the Pacific Coast had become very grave. Ships of Western powers began to visit the Sea of Okhotsk and the Sea of Japan with increasing frequency: it was obvious that Western powers were hoping to seize everything the Russians had discovered. Japan and China were becoming objects of aggression by Western powers, and aggression against Russian possessions was just a question of time.

Alarmed by these events, the Russian government ordered the ship *Baikal*, under command of Captain Gennadi Nevelskoi, to proceed to Kamchatka, investigate the region around the Amur's estuary and take action, if necessary, to prevent Western powers from blocking this natural outlet to the Pacific Ocean.

The Nevelskoi expedition reached the Amur estuary in June 1849 and began to explore the region where Poyarkov, Nagiba and others had already been in the seventeenth century.

Nevelskoi and his men were the first to sail from the Sea of Okhotsk to the Sea of Japan. Having set up a base at Petrovskoye in the Amur estuary, the expedition explored Sakhalin and discovered that it was an island. It also discovered Emperor (now Soviet) Harbour and some other places, but did not have enough time to complete its work because of the outbreak of the Crimean War.

The situation became crucial in 1854 for it had become known that an Anglo-French squadron was preparing an attack on Petropavlovsk on Kamchatka, the lower reaches of the Amur and some strongholds on the Tatar Strait coast, among them De-Kastri. It was decided to use the natural outlet from Transbaikal to the Pacific down the Rivers Shilka and Amur, as had been done in the seventeenth century.

During the winter of 1853-54 the Shilka shipyards built barges and a small 60 h.p. steamship, the *Argun*, designed to carry reinforcements for the defence of Kamchatka and the Tatar Strait coast.

On May 14, 1854, to the accompaniment of ringing bells and popular rejoicing, a flotilla of barges and launches, with the *Argun* as the flagship, began its historic voyage down the Shilka and Amur. The vessels carried 500 infantrymen, several squadrons of Cossacks and an artillery battery of four pieces. In six days they reached the site of the Russian fortress Albazin: men and officers climbed to the site of the old fortress and paid tribute to the memory of their forebears who had given their lives defending the rights of the Russian people to an outlet to the Pacific via the Amur.

The Ching court in Peking knew, of course, about the voyage of Russian forces down the Amur. But the Ching

authorities did not object, for they realised the necessity of the Russians' presence in the regions that were attracting West European plunderers. By that time both Peking and St. Petersburg had come to the conclusion that the Nerchinsk Treaty should be revised peacefully. Otherwise the territories of both states could have become the object of colonial expansion by the stronger West European powers.

Thanks to Russian reinforcements having been sent to the coast of the Tatar Strait and the Sea of Okhotsk through the Amur, an attempt to land an Anglo-French unit at Petropavlovsk on Kamchatka in August 1854 failed and the commanding officer of the landing party, the British Rear-Admiral Price, committed suicide. Several attempts to land a unit at De-Kastri in order to get to the lower reaches of the Amur through Lake Kisi were likewise thwarted.

The defeat of the Western powers on the coast of the Tatar Strait was a prelude to the signing of the *Argun* Treaty of 1858 which revised the Nerchinsk Treaty. Under the new treaty, entry to the Pacific from Transbaikal regions via the Amur was reopened.

The treaties between the Chinese and Russian governments in the 1858-61 period confirmed the now existing borders in the Soviet Far East along the natural river frontiers.

Everyone knows dolphins are intelligent creatures, but I think the whole thing's been rather exaggerated.

One day the circus director called me in.

"Would you like a good job to do?" he asked.

"I don't know, I've never tried," I replied. "I've done all kinds of things, but somehow or other good jobs haven't come my way. Anyway, what is it?"

The director explained that the circus had just received

When the director said they fed on fish, it took a load off my shoulders, and I went straight to the place where they were kept.

As I stepped smartly between the rows of cages, I suddenly spied one of the dolphins, with a fish in his teeth. On closer inspection I was surprised. He was so handsome, with his red hair shot with silver.

"Dolphin old chap," I said, "would you like some more fish?"

Dolphins Turn the Tables

by Mark ZAKHAROV
from the magazine KROKODIL

a group of dolphins to train for an act. He offered to do everything to help me train them. The dolphins would help, too, he assured me.

Weighing things in my mind, I finally agreed. "What are they like?" I asked.

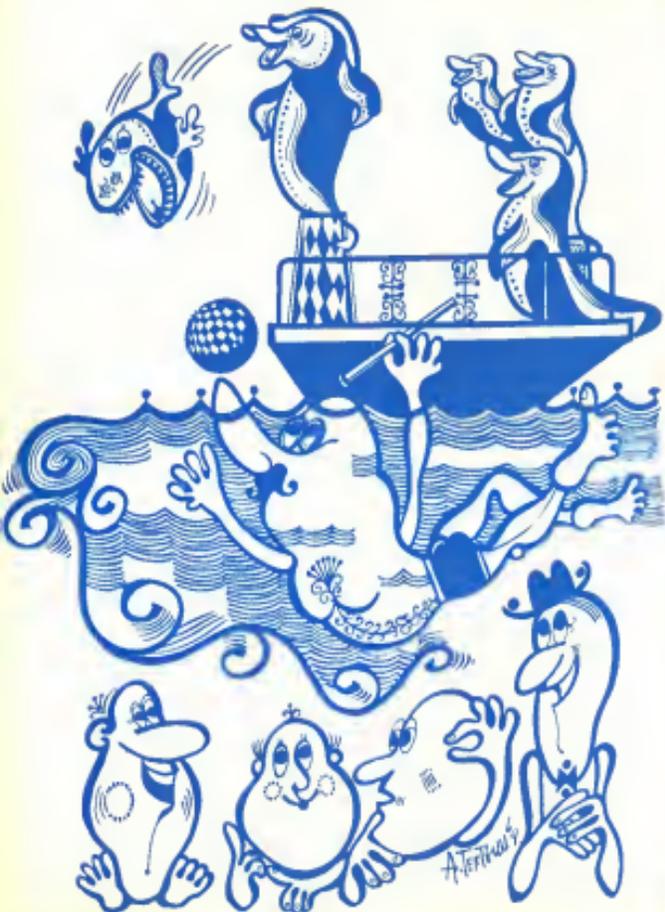
"The dolphins? Well, they're a species of animal, you know."

"Of course, I know that," I said. "But what do they eat and so on?"

"Excuse me," someone said. "That's not a dolphin, it's a Central European desman. He was purchased abroad recently. Your dolphins are in the next room..."

So I hurried there, and what I saw was just disgraceful.

"Don't you have enough cages for all the animals?" I asked indignantly of anyone who would listen. "Why do you keep them so wet in this pool?"



They gently explained to me that dolphins are sea animals, water is their natural habitat, and they only rarely jump out on dry land.

I remarked crossly that one should be warned beforehand about such things. What if I hadn't been prepared to train animals living in water? Think of my responsibility to the director!

Straight away a big tankful of fish was brought in, together with the other things needed to train dolphins — balls of all kinds, sticks, rings and what-not.

Warming to the task, I took my coat off, stepped up to the edge of the pool and leaned over the water, whistling for a dolphin. One of them, apparently the most inquisitive, was attracted. He swam over toward me, stuck his nose out of the water and gazed long and hard at me.

"Well, let's get on with it," I said to the dolphin. "I'll throw a stick to you, and you bring it back, see? And don't goggle at me like that, this is a training session."

I hurled a stick into the very middle of the pool, and the clever creature grasped the situation right away. He didn't bat an eyelid, let alone go after the stick. He screwed up his eyes, and kept on looking at me. I threw another stick for him to fetch, then a third. Nothing happened. I threw the balls in one after the other, then the rings and other things, finally hurling them about in sheer anger. In an hour or so

there wasn't a vacant space on the surface of the pool. But the dolphins just stayed put.

"So, you black devils," I said, "you'll have to be taught by demonstration, because you'll never catch on to what you're supposed to do otherwise. Just have a look."

I took off all my clothes, down to my trunks, then dived into the pool. That stirred them up a bit, and I made a start.

A month later the director rang me and asked me how things were going.

"Come and have a look," I invited him. "You won't be disappointed, I think. I can't say it's a huge success, but there are definite achievements. They grab things. Some of the things, that is."

Straight off, a board of experts and others who just took an interest in dolphin-training began arriving in shoals, so that the space around the pool was jam-packed.

I walked out among them wearing only my trunks — my black ones, as usual.

"Up!" I cried, and jumped in. At the same moment one of my dolphins, the most intelligent I should say, climbed ashore and reached out for the "stage props". He took a stick in his teeth, brandished it, and threw it into the middle of the pool. I made a lightning dash for it, caught it in my teeth and turned back. In a flash, the dolphin tossed a ball in my direction, and

I caught it cleverly on my nose, and passed it back. I thought it was pretty smart.

Then I turned a double somersault in the water, exposing different sides of my body. In the meantime, the dolphin, in leisurely fashion, shoved his snout into the fishtank, chose a fish and threw it to me. I caught it in my teeth as it sped through the air toward me. That drew a burst of applause, and the dolphin turned and bowed.

The members of the board, of course, were delighted. "It's really new!" they shouted. The rest of the dolphins were all smiles. There's no doubt about it, they're cute, all right! — How they can see things! As for me, I felt more pleased than anyone. It's marvellous how a job well done sends your spirits soaring. You really begin to feel that you're a useful person people need — and an intelligent being, at that.

A NEW HYDROFOIL VESSEL

A new hydrofoil vessel has been launched in Gorky, on the Volga. GORKOVCHANIN, as it has been named, operates with a two-man crew — captain and mechanic — and is intended for use on small rivers. The ship requires no piers or moorings as her prow moves right over the bank. The light, spacious saloon accommodate 48 passengers. GORKOVCHANIN is 72 feet long, 13 feet wide and about 11 feet high.

From PRAVDA

THE NORMANDIE-NIEMEN MUSEUM

A museum commemorating the wartime Air Squadron Normandie-Niemen, displaying some 400 documents, photographs and diagrams has been opened in the Orel Region, central Russia.

Naturally, most of the exhibits concern the French pilots who fought the Nazis alongside their Soviet comrades-in-arms over that region. The showpieces were found by children in the course of expeditions to the scene of former battles around what has gone down in history as the Orel-Kursk Salient. They also discovered graves with the remains of French fliers.

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"ART SHOW IN THE ARCTIC"
will be published in September issue.

Intourist



W e are almost in 1970... the first to see the New Year in will be those who live on the island of Sakhalin, far away in the East. They will celebrate almost twelve hours before their compatriots in the western areas of the country, letting off their salute of champagne corks to honour the outgoing year and its successor, proclaiming the traditional toast: "To the New Year, to new happiness!" But when the Kremlin chimes sound out, the twelve strokes of midnight from the Kremlin clock, the whole Soviet people — some for the second time, others for the first — will greet the New Year, for those chimes are the heartbeats of Moscow, and Moscow is the heart of the country.

Meanwhile people are busy with the final preparations for the festivities. They are rushing off to buy the last decorations for the fir tree, clearing piles of snow from the roadsides, and some of them are rushing off on motor-bikes — they are a thoroughly modern version of Grandfather Frost, the equivalent of Father Christmas.



A Happy New Year





Town dwellers are making their preparations, and country folk, too. But in the country, in accordance with ancient tradition, more attention is paid to the Old Year. People in the towns may find 15-20 minutes to spare on the outgoing year before the midnight chimes, but in the villages they see it out in style, with round dances, wearing brightly coloured national costumes, with snowball fights, and so on, starting





long before dusk. With the setting of the sun the sounds of merry-making gradually die down.

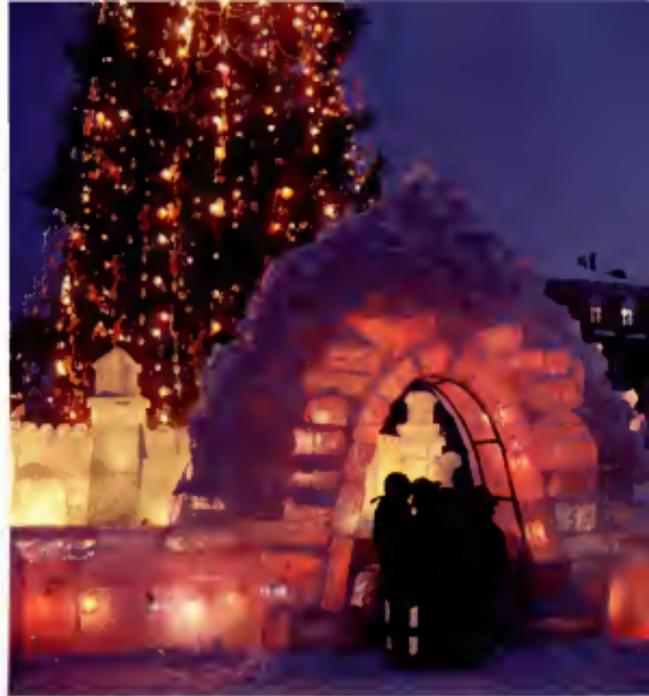
Only a few hours to go to the New Year. Everything is ready. The presents have been bought, the fir

trees decorated, the table laid for the party. The kitchen is in battle order. Everyone is silent, now, taking a breather, gathering their strength so that they will be able to celebrate the New Year as it really de-



serve to be celebrated. Apart from their strength they are gathering their thoughts, too. They are thinking back over the past year. How did they spend it, and did they make the best possible use of it? They are

thinking about how they will spend the coming year, making New Year resolutions to do better next time. And even if such resolutions are scarcely ever kept to the letter, at any rate, on the verge of the New



Year people begin to think a little more deeply than usual, and this leaves its mark upon them ever afterward.

The New Year! Laughter, noisy talk, cheerful songs. Fairy-lights twinkle in the towns, the flames of campfires flicker in the forests, where hardy outdoor types will see the New Year in sitting right there amidst the snow. In people's homes

there is so much food and drink that tables are not big enough to hold it all. Every housewife has her own culinary speciality, of course, but almost all of them serve such traditional dishes as fish in aspic, various kinds of jellied meats, caviare, roast turkey or veal. As for drinks, champagne is a must, and the rest is a matter of taste. All the same it is a bit of a faux-pas not to drink

Encounters with the Nether World



by Lev Ginzburg

A WORD FROM THE AUTHOR

ENCOUNTERS WITH THE NETHER WORLD, an abridged version of which is published here, is not simply reportage, but a narrative linked by a single theme. In the course of it the author, who was born in Moscow in 1921 and served in the army in 1941—1945, goes to West Germany to meet some prominent figures of the Third Reich who are known to him — a man from another world, from another country with another social system — only from documents and books.

He is accompanied on his travels by a Munich publisher, Max, a man of the same age as himself and who — true, "from the other side" — has also gone through the war.

An important point is that Max, although he is modelled on a definite prototype, is really a composite figure. He represents the West German who is seized with the desire to learn the truth, to dig and dig until he gets to it. This is why he accompanies the author.

To some extent one might say that the narrator himself is a composite figure, although he bears the name of the book's author, and all the events, including each of the talks described, actually took place. But in conveying his own thoughts and mood, the author presents the narrator as a representative of his own environment, his milieu, his generation and his country.

All the other characters — Himmler's son-in-law, the sisters of Eva Braun, Hitler's former secretary, Sehrach, Schacht, Speer and the rest — owe nothing whatever to invention. Their life stories, the conversations with them, and their appearance are portrayed with the utmost accuracy, with almost stenographic authenticity, although this is by no means a stenographic record in the usual sense of the term, for everything is seen through the thoughts and emotions of a man who is what he is by reason of a particular philosophy and social experience. And such a "stenographic record" cannot, of course, be cold and dispassionate.



at least one glass of ice-cold vodka in honour of the still infant year.

Most parties break up early in the morning, but many people keep up the celebrations rather longer. They may go sleigh-riding, or simply stroll through the streets laughing, chattering and singing to the strains of an accordion or guitar. And for those who want a bracer, there is hot, strong Russian tea on sale.

The author therefore asks the reader to look upon the material published here (the complete version of ENCOUNTERS WITH THE NETHER WORLD was published by the magazine NOVY MIR, and in separate book form by the Sovietky Pisatel Publishers) as a narrative about a time through which we have lived, about the victory of mankind over fascism, about the coming to power of fascism, about its social and psychological realities, and about those forces which are trying to drag all mankind into the "nether world".

Lev Ginzburg

And so once more I find myself in Munich, for the second time this year. I have been invited by Max, the publisher and bookseller, to collect texts of old German poetry and to give readings of my own translations. But both Max and I are aware that I have another, an ulterior motive in coming.

Following the war crimes trial in Krasnodar, I wrote a book entitled *The Abyss*, which told the story of the traitors and murderers of the SS Sonderkommand. And for several years now I have been haunted by the compelling desire to track down the direct chiefs of those men, their heads, perhaps even the key people of the fascist Reich who are still alive. I wanted to see them, to talk with them. When I discussed the idea in Moscow, with my friends, few believed it could actually be done.

In fact, it did come about that my wish was fulfilled, and without any great difficulties at that. Seeing that is so, the story should be told. However, for a long time I have hesitated because I am aware of the pitfall that awaits me: that an element of sensationalism will creep

into my narrative. It is difficult for the reader even to imagine what it is like when a figure which has long been relegated to history — become almost a ghost — suddenly emerges out of non-existence and assumes flesh and blood. You feel as though you are present at a spiritualist seance.

The greatest danger lies in a psychological disorientation. If I had met them in battle, it would have been easier to write of them. But when the encounter takes place over a cup of tea or coffee served in a comfortable living-room, when no one utters a discourteous word but on the contrary does their best to be pleasant and helpful, when your companion, whom you carefully examine, possesses all the traits of a human being and you, in order to keep up the conversation, intentionally cultivate in yourself a friendly approach — here lies the danger of "going soft". Herein lies a moral test... How often I caught myself thinking — a little more and I will forget who is sitting before me and why I have come here and the whole thing will degenerate into a conversation between two people who are simply trying to understand each other.

When I outlined my idea to him, Max displayed the same serious approach he would have taken to any reasonable request put by a friend. He did not have too clear a concept of the emotional significance of the proposed contacts for me. But he did realise that it was no idle curiosity on my part, but a vital undertaking; in this case, the writing of a book which necessitated the gathering of material which I was unlikely to succeed in getting without his aid and business connections. And he was prepared, as a good turn, to put off his own affairs for two weeks to assist me in mine, an assistance which involved a certain amount of inconvenience for him.

However, it was not the inconvenience that bothered Max. He was discomfited by the idea that indirectly he might be an accessory to the fact that at some future date a book would appear in Moscow which would be directed against his country; that its pages would throw yet another shadow over his countrymen who, because of historical circumstances known to all, have already earned the enmity and hostility of many people the world over.

On the other hand, he reasoned, isn't truth the best antidote to such enmity? Wouldn't many prejudices disappear automatically if a man from Russia, arriving in West Germany, were to meet as many people as possible who are prepared to show not only hospitality, but who are able, without

concealing anything, to tell the truth about what they experienced then and what concerns them today? Wouldn't the baring of the seamy sides of life serve to highlight the attractive features?

Nevertheless, in bringing me face to face and finding himself face to face with the "seamy sides", Max each time experienced confusion and shame, as though in some way he was part of that which I, not without his help, was witness to...

* * *

In the early part of November, 1968, the editorial office of the anti-nazi publication *Gestern und Heute* (Yesterday and Today) which is published in Munich by the organisation Demokratische Aktion (Democratic Action) received two letters in quick succession. The first one contained an avowal of eternal fidelity to Adolph Hitler and the aims of national socialism, the second, crude threats of violent reprisals against Demokratische Aktion.

The publication was able to ascertain that the author of the letters was a 19-year-old student named Meyer. Questioned by his school principal in the presence of his parents, Meyer explained that his ideas had been influenced by the regular reading of the newspaper *Deutsche Nationalzeitung und Soldatenzeitung*. The school principal also announced that Meyer belonged to "the number of rabid supporters of the National Democratic Party" (NPD).

Max expressed the opinion that the letters were the idiotic prank of a mentally disturbed boy and that there was no point in rushing into generalisations.

"To be truthful," he said, "I'm not at all convinced that these threats pose any real danger. We haven't got to that stage yet. Personally, I have never met any of these types from the NPD and I have no desire to. But in order to help you, I intend to invite a certain Herr B. I have heard of for you to meet. He is a member of the NPD leadership, a specialist in political education and also he is married to Himmler's daughter."

As agreed, the next day at five in the afternoon, Max telephoned Himmler's daughter. She was quite cool but said her husband would be home in half an hour and to call back then. At 5.30 p.m. Max reached Herr B., but it took a lot of persuasion before he agreed to come. Max kept emphasizing that I was "a well-known translator" of Goethe, Schiller, of "all our national literature" which has become the "heritage of the Russians as well" and that my only desire was to "learn everything as first hand". After that it took them a long time to settle the details of Herr B.'s coming:

"I hope you will not refuse me the honour of . . . Naturally, your taxi will be looked after both ways . . . I know my sister has just baked a fresh cake . . ."

Everything that Max offered by way of inducement obviously counted with Herr B. He had to be cajoled and persuaded like some famous but capricious professor being lured to the bedside of a patient. But then, perhaps he really was a major figure in his own party.

All this time, at the other end, Herr B. kept trying to pin-point the purpose of my visit. Had I been sent by "the powers in Moscow" in order to expose him? This amused me and at the same time I found it incomprehensible: why should he, in Munich, worry about the "powers in Moscow"?

At last Herr B. agreed to come at seven that evening.

We waited for him for a long time, meanwhile thinking up questions, discussing the forthcoming interview, anticipating an interesting evening. And I also thought of what his father-in-law's name had meant to the people of my generation and to millions all over the world, even though it would seem that today the name had lost its significance. Nevertheless, the spirit of Himmler could not help being present, if only because we were in Munich and the NPD existed.

He did not arrive at seven. We waited another half an hour and then telephoned. A cold, clipped, rather hoarse woman's voice replied:

"My husband has just left."

"It's discourteous on his part," Max said. "A well bred man is never late."

Max was offended.

The table was set. There was tea and cake and dried figs.

Steps sounded on the stairs. Max went out to the entrance-hall. Opening the door, I saw a tall, stringy man, the back of his head flat and close-cropped, standing at the mirror combing his hair. Then he turned, saw me, clicked his heels and with a polite smile shook hands.

He was a fairly young man, lanky, somehow flat-planed, with a short haircut, dressed modestly and neatly — checked tweed jacket and worn shoes. On his right hand he wore a thin gold wedding ring. During the entire duration of our talk he either pressed the ring-finger to his temple or to a pink cheek, propping up his head or perhaps expressing deep thought. Over his face played a wan, shy smile.

My intention was to dispose him towards conversation and therefore I began by saying I was interested in German literature and history and it could be said that I had devoted all of my 47 years to this pursuit. At this point he interrupted, said that was not so old, I was only 15 years his senior, and then continued to listen seriously and alertly. However, the names of the German poets I had translated evoked his respect, he turned out to be, or appeared to be a cultured man, and when I mentioned the seventeenth-century poet Paul Gerhardt, he at once whistled the opening bars of the Bach chorale to Gerhardt's words.

I said that I was interested in the German national spirit, the national character and that naturally, being a student of Germany, I wished to penetrate into all the peculiarities of German life, in which his party today played no small role.

He nodded, but interrupted with the remark that we Russians seemed to exaggerate the role of his party which at the present time had no real chances of victory or even of participation in government. It was a matter of the distant future, and even though he believed that the aims his party pursued would some day be achieved, it would not be soon and certainly not within the life-time of the present generation. The victor's laurels would go to his children, if not to his grandchildren . . .

I neglected to mention that at the very beginning, Herr B. spoke in grammatical and quite fluent Russian and said that if I so desired, our conversation could be conducted in Russian as he had studied the language when he was living in Middle Germany. For seven years he had subscribed to *Pravda* although at the present moment he was so involved with party affairs and his studies at the university — he was graduating this year from the law faculty — that he had somewhat lost touch . . .

We sat opposite each other at a rectangular table. He ate and drank with great dignity.

And so I told him that I was interested in the German spirit and present-day German reality and wished to understand the aims and tasks of his party, distrusting newspaper accounts. Besides which, in the course of my literary labours connected with the recent past, I had been present at the trials which took place in the Soviet Union of a group of SS men.

He glanced at me quickly and said: "The Christman affair?" — thus showing that he was well-informed in the concrete aspects of my investigation. I assented, explaining that I was concerned with the problem of the Nazi crimes which — whether we liked it or not — cannot be forgotten and to this day affect our relations with the Germans, so I would also be curious to learn his party's attitude to this question.

Finally, I let him know that I had no intention of writing about him in the newspapers and if in some future work of mine I wished to use any part of our conversation, I would give him another name, say Wagner.

"Oh, Wagner — that's very good," he said and smiled. "Wagner is a very good name, I'm fond of Wagner..."

"And for a first name, how about Gottlieb?"

He shook his head: "No, Gottlieb comes from Gott — God — while I am a convinced opponent of religion."

"Well, what should I call you then? Surely not Friedrich, that would be too banal."

"Why banal?" He was astounded. "Friedrich is a very good German name. I like Friedrich. Friedrich Wagner..."

It was now his turn to speak and he began quickly but in a firm voice.

First of all he wished to emphasise that the question I raised was one of principle. The question of national self-awareness was acquiring prime importance throughout the world — not only in Germany, but say in America, where pure-blooded Americans who were trying to keep their nation unsullied were drawn into conflict with American Negroes. The same thing was happening in Rhodesia and in the Republic of South Africa. Obviously the same problem must exist in a multinational country like Russia, with its mixed population. For that matter, the concept of nationhood was extremely complex and included ethnographic, psychological and biological factors...

"Racial?"

"If you wish, racial. It has to be taken into consideration. For instance, I can't call a man a German writer who, although he writes in German, because of his origin and biological make-up is not capable of expressing the essence of that nation whose language he uses. Of course, exceptions are possible, but..."

"In referring to exceptions, you no doubt have Heine in mind?"

"You see," he said seriously, "Heine was a highly contradictory phenomenon. He was a native of

the Rhine, extremely impressive, and to a great extent he absorbed the externals of the German spirit — witness his *Lorelei* which the German people have accepted as part of their national heritage. Nonetheless, Heine was unable to — and should not have — overcome his Jewishness and those works in which his Jewish origin comes through remain alien to us... I am not too sophisticated in poetry, therefore I will use an example from a medium in which I am more at home — the marvellous composer Mendelssohn-Bartholdy." He whistled a few bars. "Can we consider his — I emphasise marvellous — music German? I think not. Which means that national culture, like the nation itself, cannot stand other strains... It is only the composition of a man's blood that determines his nationality. You might be a thousand times German by reason of your upbringing and your views but you will never be a true German if you do not have German blood flowing in your veins."

"By this, don't you wish to say," I asked, "that the slogan of your party is 'Germany for the Germans'?"

"To a certain degree, yes. But it will take a long time, I repeat, to bring it about..."

"But if it does come about, if your party does take power, what will you do with people of non-German origin?"

"The best thing would be, if they would voluntarily leave Ger-

many. Each nation should have its own home, its national Lebensraum... You're welcome to come for a visit, to enter into business relations, to compete in this or that field, but do not try to force your way into a sphere which is inaccessible to you and alien in nature..."

"Well, and if the so-called 'non-Germans' do not want to go voluntarily, then you will have to get rid of them by force? As Hitler got rid of the Jews?"

"You see," he said after thinking, "there were two stages, two phases in Hitler's relations with the Jews. The first was a break (*Trennung*), the second, retribution (*Rache*). The first stage began long before the Nazis came to power, the second, approximately in 1941.

I have just explained to you the reasons for the first stage. As a German thinking in national terms, Hitler could not accept the exaggerated role that the Jews had appropriated for themselves in the German economy, in science and culture. In this, in his own way — that is in theory — he was right. The second stage — retribution — was brought about by other reasons and led to terrible consequences of which Auschwitz was the most horrifying embodiment. It was retribution for sabotage which the Jews — as Communists and Social-Democrats — organised against National-Socialism. But the main thing — and this has been proved by documents — was the pressure exerted on Roosevelt by American capi-

talist Jews. They demanded that America enter the war against Germany and it was this, actually, that turned the European conflict into a world war with its countless casualties. Convinced that the Jews had in fact unleashed the world war, Hitler, invoking the most cruel measures, decided to take revenge on the whole nation, without exception...

"Including innocent children, old men, women?"

He shrugged. "It would have been impossible in conditions of war, and taken too long, to ascertain the actual guilty ones. That is why, unfortunately, the whole nation had to bear the responsibility... By the way, I'd like to point out that our party does not consider itself bound in any way by any particular undertaking of the Third Reich so the question we have been discussing relates to the past rather than the present. However, you won't deny, seeing there is documentary evidence of this as well, that Hitler had reason enough to punish nations unfriendly to the Germans. Take the Poles. Isn't it well known that before the war the Poles subjected the German minority living in Poland to the most cruel humiliations and even resorted to killings? Which means that when one side violates ethical norms, the other side has the right to resort to countermeasures..."

He spoke evenly and clearly, enunciating the well-known provocationist version of operation

Gleiwitz* as though he were answering at an "examination on Nazism".

He continued:

"But we have departed from our subject. After all, it's not the past that you're interested in, but the present. The past has nothing to do with our party and each man has a right to evaluate it in his own way. So. The present reality is that our party was born as a result of the reaction which set in following the humiliations inflicted on the German nation by the victors in the Second World War and by their lackeys in the form of the present government. During the era of Adenauer, due mainly to his personality, it was still possible to preserve Germany's self-respect. Today we are in fact defenceless. On the one hand, we are humiliated by our western allies who do not consider us equal partners, on the other hand, the Soviet Union and world communism, again with the silent agreement of the western powers, are attempting to make the division of Germany permanent, with their so-called 'DDR' — the Eastern Zone. The aim which we are pursuing, the immediate aim, is the reunification of Germany,

* The provocationist attack on the German radio station in Gleiwitz, Silesia, which was organised by Hitler and Himmler and which served as one of the formal pretexts for Germany's attack on Poland in September, 1939.

the creation of a worthy German fatherland..."

"Within the framework of the existing borders, it goes without saying?" Max inquired hopefully, chagrined by the fact that his guest had become so frank and overstepped the bounds of courtesy.

Herr B. looked at Max and condescendingly, rather negligently, agreed: "Yes, yes, within the 1937 borders."

"And what kind of an order would you like to establish in this Germany of yours?"

The "future minister" but present student replied:

"Seeing it is unlikely that our plans will be realized in the near future, it is too early to speak of that."

However, he was now in his stride and proceeded to conscientiously expound the programme of his party in a doctrinaire voice:

"The NPD arose out of an active resistance to communist dogmas which hold that man can be re-educated by taking away his private property. We believe that man cannot be changed, that in all circumstances he remains the same, with his inborn qualities and natural, in other words inborn, striving for property. This striving cannot be overcome, and no one has managed to do so. At the same time we are opposed to capitalist exploitation and stand for a reasonable division of income within the national family..."

He asked for more tea and then continued:

"Allow me to pass on to the second part of your questions, to so-called personal responsibility... Our party wholly repudiates the persecution of former Nazi criminals, even though we are quite conscious of how serious were their crimes. The issue here is not the protection of former Nazis, but the fate of a nation. Is it really worthwhile persecuting masses of people — for the Nazi crimes bore a mass character — who were simply doing their duty? Is there any national sense in multiplying the number of those sentenced, in dragging people into the process of retribution against their own countrymen, in deepening the divisions between people of one nation? In general, war crimes are hard to delineate. Who has counted up the number who died in the bombing of Dresden or the losses Soviet armies caused on German soil? Is there any way to measure the cruelty shown by the Czechoslovaks and Yugoslavs to Germans? We do not consider that now is the time to dig up these crimes and we are prepared to show good will and forgive our enemies much. Speaking frankly, the thirties and forties were marked by extreme cruelty. It was a sickness of the time, let us treat it as such. Is there any real possibility of establishing today the concrete guilt of concrete people who belonged to their own era? Only our weakness leads us to curry favour

with our conquerors and stage trials which divide a nation and undermine the faith of the young generation in their fathers... Let us look to the future and build it in a new way, taking into consideration past mistakes..."

I decided not to get into the discussion in order to give him the opportunity to say everything he had to say. I restricted myself to inquiring what was his attitude to the youth question.

He replied that he considered the young "left" to be psychopathic, that they were depraved, that in a feverish delirium they dreamed of "the world revolution" and that all this was caused, once again, by the fact that their national heritage had been knocked from under their feet.

"What is the attitude of young people towards Hitler?"

"I would say, indifferent. Partly from misinformation, partly from lazy thinking... But Hitler's time is done with and there is no going back."

Towards the end he began to complain about how difficult it was for his party, that it was persecuted and slandered...

The "consultant on political education" who had been invited to the house "to give a lecture" considered that his mission was accomplished and looked at his watch.

We rose and saw him out. He put on his topcoat and a fur hat — a tall, lanky man, the future member of a future government.

Saying his farewells, he asked Max if he would sell him certain text-books he needed at a discount.

He and his wife have a small son — Himmler's grandchild. Before leaving for home he telephoned his wife and spoke to her tenderly and teased his boy...

We decided to give him a lift home in the hope that he would invite us in and that we would meet his wife.

On the way we spoke of Russian literature. Dostoyevsky he could not accept, nor Tolstoy, Gogol he thought was interesting, as well as Mikhail Zoshchenko. But he was very fond of Tchajkovsky and sitting there in the car he began to whistle the beginning of the Sixth Symphony, beating time with his hand...

Then he told us how in his youth he had lived in the DDR, had been a member of the Free German Youth, "had with loathing sung the songs of Becher" and in 1954 had left...

We let him off on the outskirts of Munich, in front of a long, four-storeyed building. Somewhere above, a light shone in the window. Herr B. raised his head and waved to someone, then thanked us for the pleasant evening and the splendid China tea (the next day we discovered that Max had absent-mindedly made the tea out of bay leaves). "Because of the late hour" he did not invite us in.

"Good-bye Herr Wagner!"
The next day he came again — after Max telephoned him and

said that the required text-books were at his disposal at no cost and that we would be glad to bring them over. Herr B. rather haughtily refused the courtesy and said that he would come for the books himself at five o'clock: obviously he did not wish us to meet his wife.

He arrived, as he had the previous evening, late. I examined him more attentively. He did not seem to me to be quite as thin as I had thought. His large nose drooped over a small mouth, he was pink-cheeked, clean-shaven. And the shoes that last night I had thought were rather worn, were simply a very large-sized black boot. There was something in him of the clerk, and of the "illegal" fascist, and of the eternal student.

We had not expected him to stay, but his visit lasted over an hour.

Herr B. asked for a cup of tea, Max made it. When B. sipped at it he decided that last night's was better. (This time it actually was China tea.) Then he coldly inquired if I had any further questions. Today he was neither as courteous nor as talkative as he had been the day before.

I began by asking how he had felt when he had lived in the DDR and belonged to the Free German Youth: had he felt he was leading a double life?

"You see," he replied frigidly, "I never led a double life because from the beginning, from child-

hood, I was a convinced anti-communist, as were my parents. We came from Pomerania and only the Russian invasion forced us to find refuge in Thuringia in what is now Erfurt Province. My father was an important businessman and naturally all our property was confiscated. Today the West German government pays me a tiny compensation, some seven per cent, but this modest sum permits me to combine my party work with studies at the university...

"And so, being a convinced anti-communist did not make a split personality out of me because all the people in my immediate surroundings were anti-communist as well. We lived for one thing only — the arrival of the Americans who would liberate us. At the end of the forties it still seemed feasible..." He laughed sarcastically. "We were convinced that our sojourn under communism was temporary and that one needed only to conform on the surface in order to avert trouble. At that time our family considered two alternatives: to take advantage of the open border in Berlin in, order to cross to the West permanently, or to await the coming of the Americans. We chose the second, based on the fact that I needed to complete my secondary school education. The communist regime has a more complete system of education and I could avail myself of it. Then, once I had my school leaving certificate, I could choose freedom.

"I was considered a model pupil, my Russian was good and my services were even used in the capacity of interpreter during so-called 'friendship meetings' with soldiers from the Soviet garrison. This gave me the opportunity to know the enemy better. I studied 'The Short History of the CPSU' which contains in condensed form all communist doctrine, I subscribed to *Pravda* and *Komsomolskaya Pravda* and became so adept at communist terminology that I had no trouble in communicating with Soviet army men.

"In 1951, if you remember, a World Youth Festival was held in Berlin and as an activist I was delegated to attend. In the daytime I paraded past the stands, carrying a blue flag, and dressed in a blue shirt under which I wore an ordinary one. As soon as night fell, I would tear off the hated uniform and head for West Berlin. We could go to the cinemas which showed western films, we could go to dance halls and also we were provided with special anti-communist literature printed on flimsy paper. We would carry the material back into East Berlin and distribute it to Festival delegates...

"At last, in 1954, I found myself in the West... I would like to point out that while expressing my aversion to communism, I in no way associate this hatred with the Russian people. Here, in Munich, I have close connections with Russians who are in the

NTS* and I am opposed to those members of my party who refuse to co-operate with them on nationalistic grounds. Dogmatism can only harm us."

Half-shutting his eyes, he sipped at his tea and looked at me once more.

All the time he had been speaking, I had been observing him with great interest.

Max, who had kept silent, looked thoroughly dejected. Obviously he himself was unhappy that he had organised the meeting, which left no possibility of "human, mutual understanding". Feebly, and it must be said, helplessly, he attempted to "clarify terms". The whole conversation which had taken place in his study upset him a great deal. The only people he was accustomed to entertaining in his home were of similar mind to himself, who were devoted to the noble pursuit of literature, were free, he thought, of partisan leanings. And here he had unwittingly become "the organiser" of a distasteful political dispute.

"Herr B.," he said with vexation, "you have condemned communism, but so far you have not uttered a single word of condemnation of national socialism which for us Germans was

* NTS — National Labour Union, an anti-Soviet emigré organisation.

a national calamity and a disgrace..."

Himmler's son-in-law, addressing himself not so much to Max as to me replied:

"That is a harmful theory which our party decisively rejects. National socialism, in spite of mistakes and shortcomings, had a number of positive aspects. Hitler guaranteed the German people work, he disciplined the youth, lifted the German economy, and at last entered into a bloody, self-sacrificing war in order to rid mankind of communism..."

I then asked how it was that if there had been a rational kernel in Hitlerism and it could really bring benefits to the German people, that the best people in the country had either left or refused to work with the Nazis. In fact, not a single leading German had cooperated with Hitler...

He looked at me sourly and said:

"And who do you consider 'leading Germans'?"

"Thomas Mann, Einstein, Ossietzky, Stefan Zweig, Feuchtwanger, Ricarda Huch, Brecht, Hauptmann..."

He laughed.

"I wouldn't call any of those you have named leading Germans. Thomas Mann is actually one of the most boring writers: admit that you haven't read him yourself... Hauptmann went round the bend. The rest were all Jews. Can Thomas Mann be

compared with Dwinger, Kolbenheyer, Hans Grimm?" To my astonishment, your concepts of German literature are extremely limited. By the time Thomas Mann left Germany, his book sales had dropped drastically, while those of Dwinger had shot up into the millions. Ossietzky** was simply a journalist, a newspaper hack who was given the Nobel prize only out of anti-German considerations and thus the Prizes were discredited forever...

There was no point in arguing with Herr B. Neither arguments, quotes, nor the citing of the most obvious facts would have had the slightest effect. Only the use of force could have cracked that veneer.

The spoken language of an educated German differs little from the written language. In

*Edwin Erich Dwinger: an obersturmführer in the SS. Today lives in West Germany. Has published a number of fascist books — "General Vlasov" (1951), "Twelve Conversations" (1963) among others. Erwin Guido Kolbenheyer: Austrian novelist and Nazi ideologist (d. 1932).

Hans Grimm: one of the most popular Nazi authors. Responsible for such catch-phrases as "the Führer and the people", "racial purity", "superman", (d. 1959).

**Carl von Ossietzky (1889—1938), publisher of the magazine *Weißbuche*, was awarded the Nobel Peace Prize in 1936 when he was already in the Papenburg-Esterwegen concentration camp. Under inhuman conditions, subjected to moral and physical tortures, Ossietzky was forced to publicly decline the honour.

B.'s speech, the difference was non-existent. As he spoke he scarcely altered the intonation of his voice or the expression on his face. Only once, either sneering or grinding his teeth, he harshly remarked that anti-communists have the same right as others to "physically liquidate" ideological opponents.

I asked whether he himself was capable of such "liquidation". He swung his crossed leg back and forth a few times and smiled dryly.

"By nature I am not a blood-thirsty man. But such concepts as kindness, humaneness, do not exist for me independently, abstractly. I am above all a fighter and when I enter into a polemic with an opponent..." He broke off and then added: "No, I will never become a liberal, that much is clear..."

Millions of people had perished, and opposite me here in Munich, in November 1968, sat Himmler's son-in-law, the perpetrator of his father-in-law's stock and his ideological line. He was cold, passionless, stiff. He expounded a doctrine. Perhaps the most characteristic feature about him was the dry, inhuman conviction with which he spoke of the most terrible things...

Max decided to ease the atmosphere and turning to B. made an unfortunate and ill-conceived jest:

"I'm really glad that we've all had a chance to meet and talk. If

some day there's war and Germans take Moscow, then Ginzburg will have an influential friend at court. On the other hand, if the Russians capture Munich, then you will have someone to speak up for you..."

B. replied seriously:

"If the Russians take Munich, I won't be alive by then."

I very much wanted to meet Himmler's daughter. What was she like? I wondered why he had chosen her: had he fallen in love, was it pure chance or out of principle; or perhaps a form of psychological masochism had led to his choice? I asked him whether he considered his dead father-in-law a criminal.

He shook his head.

"Certainly not... He had his own tragedy... It's a complex matter."

Then I asked him what his acquaintances, friends, family thought of the issues we had touched on.

"They are in complete agreement with me. In our personal lives we do not maintain relationships with people who have alien views. Germany has marked us out for serious tasks. For the sake of our cause we sometimes have to rely on temporary allies, the Americans for instance, whom we still hope to manage. But in private life we mix only with our own people..."

We parted coldly, almost in hostility.

(to be concluded in the next issue)



Soviet Revolutionary Posters

by Kirik ORLOV

In the first years of its existence the characteristic feature of the young Soviet State's life was not only the desire of the people to quench their thirst for freedom, peace, land and bread, but also their yearning for culture and art.

And though Russia, exhausted by the imperialist war and the consequences of the czarist regime—starvation, ruin and epidemics — was also prey to sabotage by counter-revolutionaries, and subsequently to foreign intervention, the very nature of life of the Soviet people had a trait of inner joy and optimism.

Magazine covers and revolutionary posters proved in those days to be the most effective means of pictorial art. The posters were especially popular. They appeared on house walls, fences, in railway stations. They were redrawn in enlarged copy. In the same way as popular song, poster was a production of an anonymous writer, yet it lived in people's memory as an epoch-making image.

Often posters produced in a day or so served just as much as newspapers as a means of getting information to a vast public.

Now as you look at these stirring works of graphic art, you not only sense the flavour of the time, you derive aesthetic pleasure from the way content and form are so wonderfully suited to each other. The posters of those years presented a number of characters, heroes of the new society — the worker, the Red Army man, the sailor, the peasant and the working woman — and also some obnoxious characters, such as the czar, the general, the factory owner, the bourgeois, and so on.

Posters forged the new heraldic device — the hammer and sickle; posters influenced the design of banknotes and postage stamps; posters led the way in another here — for on them representations of Lenin appeared for the first time ever in Soviet pictorial art.

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Постер на русском языке

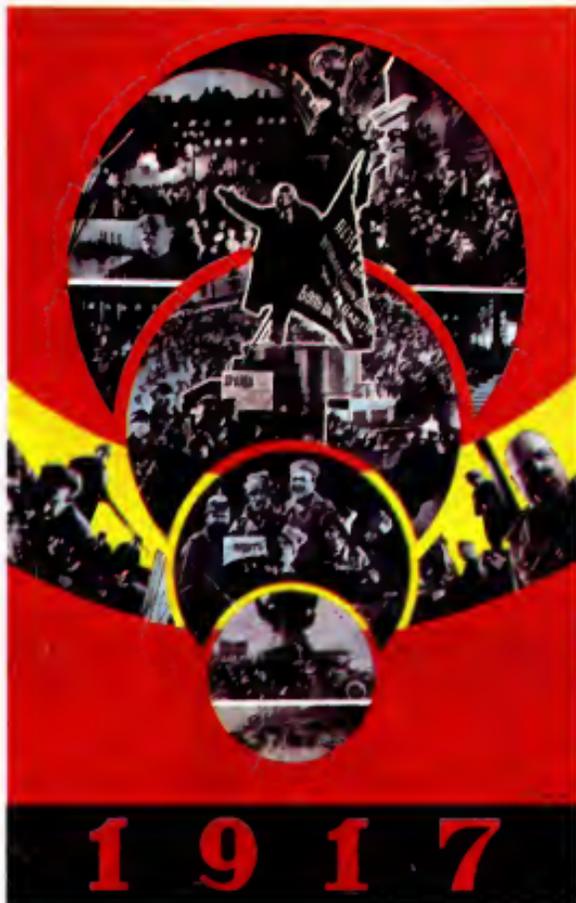
**БРАТ ЗОЧЕТ ЗАВЛАДЬ МОСКВУ
СЕРДЦЕ СОИЕТСКОЙ ГОСИИ
БРАТ ЗОЖЕН БЫТЬ УНИСТОЖЕН
ВПЕРЕД ТОВАРИЩИ!**



1917

ВНИМАНИЕ! Этот плакат является
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1917



ЧЕТЫРЕ ГОДА.





Letters to the Editor

Continued from Page 5

I would like to correspond with friends from Western European countries. I am 18, can write in English, Russian and Chinese. I collect records, coins and horns of rare animals. I am interested in light music, cinema, literature and sports.

Ts. Bold, P.O.Box 36/16, Ulan-Bator, Mongolia

I would like to have pen-friends all over the world. I can correspond in Portuguese, Spanish, French, English and I am learning German and Rumanian. I am a 23-year old student of mathematics. My main interests are mathematics, politics, languages and natural sciences (I am very interested in psychology).

Alvaro da Silva, R-Arcoz Indeiro 25-2-E, Lisboa-1, Portugal

I am a middle-aged Hungarian teacher. I have always been interested in the world at large. Our globe is shrinking so fast each day with all of the scientific progress being made that we can no longer think of the people of the world as strangers. The more we ordinary people can learn to know one another, the sooner we shall achieve world-wide peace and goodwill. I should like to become intimate with people of other countries and with their ways of thoughts and behaviour.

Elizabeth Muzszel, Nagykanizsa, Béke u.33, Hungary

I am seeking pen-friends from among subscribers of SPUTNIK. I

am a student, twenty-six years old. My interests are philosophy, psychology, music, travel, stamps. Sharing ideas on these subjects and on life in general with friends of other lands will be profitable, as well as enjoyable.

Vincent Collins, Box 323, Berryville, Virginia, 22611, U.S.A.

I am 14 years old and I would like to have pen-friends all over the world. My favourite sports are badminton and swimming and my hobbies are pop music, films and collecting souvenirs from other countries.

Marie Maung, Number 8, Windermere Park, Rangoon, Burma

I am a chemist engaged in research. My age is 28. I am interested in photography, tourism and in collecting minerals. Can correspond in English, Russian and German.

Heiger Geuner, 32 Freiberg, Mendelstrasse 36, German Democratic Republic

I am a 20 year old girl. My hobbies are reading, pop music, theatre and travel. I would like pen-friends anywhere, especially in Europe and U.S.A.

Sarojini Cooke, 1/3 Arcthusa Lane, Colombo 6, Ceylon

We are two friends studying at the same school. We would very much

like to correspond with young people from all over the world. We can write in English, Russian and Bulgarian.

Tchavdar Draganov, ul. "Lazar Stanev" 23A, Sofia 15, Bulgaria
Branimir K. Boguruev, Blvd "Evilgiz Georgiev" 22, Sofia, Bulgaria

I am 27 years old. Travelling and corresponding are my hobbies. I am interested most of all in correspondence with friends from West Germany, Australia, U.S.A., Canada and Africa. I can write in English and Urdu.

A. Rasheed Azad, C/o Ch. Kahmatullah Esq., Amanat Colony, Bahim Yur Khan, West Pakistan

We are sisters, aged 17 and 14, and we want pen-pals. We both write in English and German.

Kate and Anna Nyberg, Torben Dices Alle 2, Copenhagen 8, Denmark

I wish to correspond with pen-friends from all countries. My age is 22. I am interested in oil painting, travelling, music reading and correspondence. I would prefer pen-friends from Africa, Japan, England and southern regions of Pacific.

I.J. Thom, 26 Smith St., Hampton, Vic., Australia 3188

I want pen-friends from different countries. I am 16 years old, studying Russian and English. I like literature, history, ballet and opera. I collect stamps and records, and I am fond of drawing. I study at the Economical Technical School.

Elzbieta Iwanicka, ul. Zelazna 42/m 16, Warsaw, Poland

I am a 21 year old student of Mechanical Engineering. My interests are stamp, F.D.C., viewcards, badminton and cricket. I know English.

Sundil Bajbans, C/o Sh. Krishna Ram Advocate, 21-1-Block, Sri Ganganagar, (Raj.), India

I am 22 years old and a student. My chief interests are anthropology, philosophy and music. I speak English but can translate Spanish and French, and would like to have pen-friends from all over the world.

Ida Potash, 2653 Bedford Avenue, Brooklyn, New York, 11216, U.S.A.

I am eager to find pen-friends all over the world. My hobbies are sports, music and cinema. I collect records, pencils and pens. I know Russian, Bulgarian, English, German and French. My age is 19.

Ivan Borisov Simeonov, ul. "Rila" 42, Kustendil, Bulgaria

I am a 16 year old Scotch girl, and I would like pen-friends from all over the world, especially from Scandinavia. I love music, tennis, swimming, reading, chemistry and philately. I am learning Russian and can correspond in English or French.

Lorna S. Ferris, 171, Fortis Green Road, London, N.16, England

I would like to correspond with friends from U.S.A. and Great Britain. I can write only in English. My hobbies are music and astronomy.

Teddy Hembekides, Hembekides Pharmacy, Kas, Beirut, Lebanon

I am eager to find friends (of 18 to 20 years old) from various countries of the world. I collect records with songs of "The Beatles", "The Rolling Stones", "The Beach Boys" and also viewcards. I know Russian, English, French and German. I like music, especially Beethoven's, Mozart's, Tchaikovsky's, Verdi's Bellini's.

Nora Nikofova, ul. "Slamichil Volevodza" 2, Ruse, Bulgaria

I am a lad of 19, a student, and am interested in making pen-friends of either sex all over the world. My main interests lie in coins, blades and

books (on topics on which little literature is available).

Brij Bhushan Sharma, House No. E.11-A, My. Colony, Dehradun (V.P.), India

I would like to get pen-friends from Denmark, Norway or Sweden. My hobbies are stamp and viewcard collecting and correspondence.

C. Macollan, Rua Mineiro Couto 35 5765, Rio de Janeiro, G.B., Brazil

I want pen-friends all over the world. I am 16 years old and interested in films, modern music, viewcards, books, travel and art. I can correspond in French and English.

Enalici Victor, Sculler's Market Street 6/A, ap.15 Tirgu-Seuris, Romania

I am eager to correspond with friends from various countries. My hobbies are music, films and travel. I am 17 years old.

Eileen Whelan, Nancy Crescent, Cannich-on-Sun, Glippery, Ireland

My age is 23. I would very much like to get pen-friends from different countries. My hobbies are foreign languages, viewcards, stamps, swimming. I can correspond in English, German, Italian, Arabic and several Slavic languages.

Jan Zarecki, Wroclaw-2, Box 262, Poland

I would like to have pen-pals all over the world. I am aged 22 and I know English. My hobbies are travel, table tennis and music.

Avinash L. Masharani, 236 Shrutola Mansion, Block No.3, Wadala Station Rd., Wadala, Bombay-21, India

I am seeking a girl pen-friend. My hobbies are music, stamps and viewcards. My age is 21 and I know English and French.

Bahar Raop, 25 Cousins, P. 8 4182 S, German Democratic Republic

I would like to have pen-friends from all over the world. I am 15 years old and my interests are athle-

tics, coins, music, theatre, swimming and birds. I can write in English.

C. Schoonbee, 20 Krugerstreet, Steynsburg, C.P., South Africa

I am a boy of 17, looking for pen-friends from all over the world. I know English, Urdu (my mother tongue) and a little German. My hobbies are correspondence, pop music, postcards, records.

Tahir Alavi, 21 C.E.S. (K), Gulshan, Dacca-12, East Pakistan

I am an engineering student of 20 I know Russian, German and Bulgarian and I shall also try to answer letters written in English and French.

Dortana Ivanova, Blvd. "Georgi Dimitrov" 113, Vh.B, Stara Zagora, Bulgaria

I would like to correspond with young people all over the world. My age is 17 and I am interested in stamp, picture and viewcard collecting, football playing and gift exchange.

Bahjat Abid Al-Tikrety, Baiji, Iraq

I would very much like to have pen-pals from all over the world. I am a boy of 18. I know English.

Mahesh Chander, 240 Laxmidal Nagar, New Delhi-25, India

I would like, very much indeed, to have as many pen-friends as possible from the European and especially Eastern European countries. I speak English, French, Italian and of course Spanish. I am 23 years old, interested in literature, politics, art, travel, music, etc.

Tabaré Azcona S., Bosque 15, Pastores, Naucalpan, Méx., Mexico

I am eager to exchange stamps with philatelists from Europe, U.S.A. and Japan. My age is 21 and I like hunting, sports, music. I am also interested in stamp, viewcard and photo collecting. I know English and Russian.

Balor Balhu, Dornagave Aunias Holboeck, Mongolia

JANUARY

Black resinous smoke touched
with crimson flame wreathed
from the bonfires.

The smoke of those night bonfires
and the heavy January frost hung
low over Moscow.

Trams crawled through the smoke
with a harsh clangour. Inside them
was a moss-like growth of hoar-
frost, and they resembled icy caves.

Whole beams and old telegraph
poles burnt on the bonfires in the
squares. Warming themselves by the
fire were militiamen in grey
astrakhan hats with red tops, which
were responsible for their nickname
"robins". In their hands they held
the bridle reins of restive, frost-
coated horses.

From Red Square came the sounds
of loud explosions. They were break-
ing up the frozen earth there.

Moscow was attired in the black
and red mourning of its bonfires
and smoke. There were black and
red bands on the arms of those
keeping an eye on the endless
crowds moving slowly towards the
Hall of Columns in the House of
Trade Unions, where Lenin lay.

People had begun their queuing
a long way off, in various parts of
Moscow. I had joined one such
queue at two o'clock in the morning,
near Kursky railway station.

By the time we got to Lubyans-
skaya Square we could hear the
distant strains of the funeral march
from the direction of the Hall of
Columns. At each step they were
a little louder, and the talking began
to die down. The steam of people's
breath rose from lips in shuddering
gasps, which quickened as they
advanced.

"Farewell brothers, you trod with
honour
Your noble path of valour..."

Someone was singing in an under-
tone, but broke off suddenly. Any
sound seemed superfluous on this
Arctic night. Only the crunching and
shuffling of a myriad feet on the
snow was natural, a constant, ma-
jestic sound as people made their
way to Lenin's catafalque from the
city's outskirts, from the townships
outside Moscow, from the farms and
the factories, which were still and
silent. From everywhere they came.

Silence hung frozen over the city.
Even on the distant railway lines
the locomotives were not hooting as
usual.

The whole country was moving
towards that high catafalque where
amidst the flowers and scarlet
banners people could see the wasted
face of a man with a great pale

FROST



by Konstantin PAUSTOVSKY
from THE WANDERER'S BOOK

forehead and eyes closed as if he
had just crinkled them up.

Everybody came. For there was
not one person whose life had not
been affected by the existence of
Lenin, not one who had not ex-
perienced the effect of Lenin's will.
He had changed life. And it was
a change comparable to that geologi-
cal upheaval that had shaken Russia
to its very foundations.

In the frozen Hall of Columns
hung the breath of thousands. From
time to time the harsh wailing cry
of a fanfare broke into the evenly
flowing strains of the orchestra. But
it quickly died away, and the or-
chestral music flowed on, giving
our grief solemnity and majesty, but
not assuaging it.

With me in the crowd was sea
captain Zuzenko, who was on the
staff of the seamen's newspaper
On the Watch. We were neighbours,
living in nearby cottages out at
Pushkino. I had nowhere to live in
Moscow at the time, and Zuzenko
had found me a refuge at Pushkino,
not far from Moscow, next to the
place he lived in himself. It turned
out to be a summer cottage as
empty as a barn and in it our
voices boomed hollowly.

Zuzenko was an obstinate, kind-
hearted soul. We made friends,

evidently because of our sharply
contrasting characters. He never had
any doubts, while I was beset by my
full share of them. Zuzenko was
a bit rough-and-ready, and given to
derisive banter, whereas to my
mortification I was polite even to
the pickpockets on trams, and did
not enjoy mockery.

We walked on in silence for a long
while. Then Zuzenko stopped short
and said fiercely: "Isn't it bloody
cold! Just like those cod-eating
regions (that was what he jocularly
called all the Arctic countries). Even
my eyelids are freezing. It's a frost
on a grand scale!"

He was quiet for a moment and
then went on: "Everything's on
a grand scale these days. Look at
Lenin... A destroyer on a grand
scale of all that is obnoxious, and
a creator on a grand scale...
Breathe through your scarf, or you'll
get your bronchial tubes frozen...
What a pity I never managed to talk
to him about a world union of
seamen. That would have been
a talk on a really grand scale."

We filed slowly past the cata-
falque and walked even more slowly
out of the Hall of Columns. Every-
one looked back, slowing down and
trying with a last glance to impress
on their memories what they had

seen — the face of Lenin, his domed forehead, compressed lips and smallish hands.

He was dead, that man who had so tempestuously refashioned the world. Each of us was wondering what would happen to us now. Where would the country head now? What would be the fate of the Revolution?

It seemed as though time, too, had frozen. The epoch had reclaimed its own, and had lapsed into silence. It was hardly likely that anyone would be able to hold it on its former course.

"Our children," Zuzenko said as we left the Hall of Columns, "will envy us. We've been in the very thick of history. You understand?"

Like everyone who lived at that exciting time of lightning events, I understood it perfectly well. Not another generation had been through what we had. They had not known such upsurges, such hopes, disappointments and victories. Green with hunger, and black from battle, the victors were kept going only by an unwavering faith in the triumph to come.

I was thirty at the time, but my experience of life seemed so immense that it was awe-inspiring to look back upon. I even felt a chill hand on my heart at the thought of it.

"Am I really a child of my time?" I wondered. With my whole being I realised that I was inseparable from the time, from the fate of the country, from the joys so rarely experienced by my people, and the monstrous, unforgettable sufferings

which had fallen to their share in such undeserved profusion.

Zuzenko and I walked to the Severny Station through streets in the harsh grip of frost. It howled venomously beneath our feet.

"The age strides along its iron road," I said to myself. The words haunted me all day.

"What are you muttering about?" Zuzenko asked.

"Just muttering... Nothing really..."

"The age strides along its iron road" ... But that road is leading to a golden age, to peace and reason. To a golden age! One must have faith in that, otherwise life is not worth living.

It took Zuzenko and me a long time to get to Pushkino on an empty suburban train, which clattered and swayed from side to side through dense clouds of steam. The wheels resounded loudly as they rolled over junctions in the rails, and the sound was taken up by a night echo. This, too, seemed to be frozen, and so it rang and crackled like thin ice shattered by a stone.

At Pushkino everything appeared to be steaming in the intolerable frost.

"It's forty degrees below, if not more," Zuzenko estimated. "Come to my place. Let's warm ourselves up."

I liked going to Zuzenko's. His little cottage was buried in snow-drifts up to the windows.

He lit a candle. Fastened by drawing pins to the log walls were posters of foreign steamship lines. They were torn and ancient, but still enticing. Particularly one of

them, which showed a striped beacon — red and white — on a sandy shore, and also an oily sea and oleanders in bloom. I did not believe that such a combination of scarlet flowers and violet sea could exist anywhere in the world.

It was always cold in Zuzenko's cottage, and the windows were always iced up — that season the snow fell almost without a break. The winter cold seemed to have shrivelled up the posters, and dulled their colours.

I loved to look at them, understanding full well that I should never get to any of those magnificent places. Apart from the posters, Zuzenko had a Bible, sailing directions for the Atlantic, a few books on Marxism, and the "N" volume, rather tattered, of the Brockhaus and Efron Encyclopedia.

Zuzenko, it turned out, had made a study of the Bible so that he could carry on a fiery, denunciatory debate on the subject with clergy in Australia, where he had lived for some years. This was his favourite occupation, after nautical matters and his constant skirmishes with all kinds of yesmen, bureaucrats, mother's darlings, and intellectuals who had lost their revolutionary fire.

Zuzenko lit his highly perfected Australian primus. It roared like an overheated steam boiler and was forever on the point of explosion.

The cabin got warmer.

We silently drank tea with dried black bread. Then Zuzenko asked: "Are you going to Lenin's funeral tomorrow?"

"Of course."

"What are you going to wear? The frost is going to get worse. Your autumn coat — it's just a bit of sailcloth, and that's being polite. And you're shivering already! It's a pity I haven't a thermometer."

"I've got one."

"Then take your temperature! I'll look in tomorrow morning. Early."

I left from Zuzenko's place to mine there was a little path, overhung with the snowladen branches of thick fir trees. I brushed against them and several times the snow went down the back of my neck. Each time I shivered as if I had been struck by a knife.

My room was also cold, like the inside of a refrigerator. I lit the stove and lay down straight away in my clothes, covering myself with a tattered bearskin.

I had taken the room along with this enormous skin and some shabby furniture. The dust on the furniture had simply ossified, and you could not get it off anyhow — unless perhaps you used a file.

The curtains were frozen to the windows, and mice squeaked in the gaps between the logs.

Even under the bearskin I caught the nauseating smell of mice droppings. And all the time I was thinking, losing the thread of my thoughts by the minute, about my unsettled state, about a good clean up, a good wash and a good airing that I should do both in life and in the room. But that couldn't be done in winter time. It was as though the disorder of my existence had frozen

to me and I could not tear it from me anyhow — I had not the strength.

I realised I was ill, and I said in an overloud tone, to the whole of that empty frozen cottage: "A person cannot be alone. If a person is alone, it is his own fault. That's the only reason."

I repeated to myself: "It's his own fault!" It made things no easier. Loneliness stood all around me — cold and dead, as if I had pressed my face against the icy glass and discerned through it nothing but a grey plain, where everything had been killed by frost, where there was not a single tree, not a single splash of colour, not one distant human voice.

Beneath the bearskin I turned this way and that. My head was agonising. It occurred to me that now, at this particular time, one must not give way to confused and sorrowful thoughts, must not allow oneself to be overcome by grief.

The world was shaken. The raging frost could not kill the sorrow in men's hearts. Moscow was ablaze with funeral pyres. People were waiting to rid themselves completely of millennia of incredible suffering. The man who knew what to do had gone.

He had known. But did we know?

I stretched out for my watch. The stove had burnt out. In the light of the embers I saw that it was six o'clock.

In the walls the mice scampered about and squeaked with increased vigour. My head felt terrible.



"Lenin is Dead".
V. Shatalin.



A grey half-light slid into the room from a window and fell right into the darkness, onto the floor.

I had to get myself up to go to Moscow.

While I washed in melted ice, the twilight began to fill the room with deep blue. Then the orange stain of the sun fell upon the blackened walls and on a photograph of Blok. On his face was a trace of the hauteur of genius.

Zuzenko knocked on the window and shouted, his palms against the glass, that I should not even dare open the door to him. The frost was really on the rampage and seared the lungs, he said.

"It's out of the question for you to go to Moscow," he shouted. "Stay here. Keep in bed. I'll come and tell you all about it when I get back."

I had neither the strength nor the voice to argue, and he went off. All the same, I got into my coat, wound my old scarf round my neck, pulled my hat down over my ears and went out.

I got to the railway station just in time to see the last train of the morning leave for Moscow. I was too late.

I started walking along the railway track towards Moscow.

But I did not manage even a mile. My head was in a whirl. I felt like sitting down on a slope, in the snow, just to rest a little. But I realised that in such a frost it was unthinkable. So I dragged myself along, stumbling from time to time, and realising that it was senseless to go on and that I should turn back.

According to an idiotic habit of

mine I kept saying to myself that I would go on to the next telegraph pole and then turn back.

The telegraph pole kept me upright for a long time. I leaned against it and looked around me. I saw that Pushkino was smoking away through all its stove chimneys, sending up its birch-tree smoke. It was bright red from frost.

Before me the River Klyazma wound, steaming away just as furiously as Pushkino. I had the feeling that it was much warmer there in the vapour than in this not very tall wood.

The wood was crackling with frost, like firewood.

Each snowladen fir tree stood like a sentinel on guard over huge mounds of light silver, all that hushed winter bounty.

I knew that the woods did not extend very far in these parts, but the snow confused all distance and deceived the eye. So the wood gave the impression of some virgin waste, where not a single human being had trodden for centuries.

I stood waiting. In that brittle silence, I was convinced, I must hear the distant, combined moan of all the factory hooters in Moscow. Perhaps I would even hear the thundering breath of the salvos.

But everything was very quiet. Only the wood crackled more and more frantically.

At last from the direction of Pushkino there came a mighty roar, growing louder as it approached. It was the Siberian express, pushing before it a column of steam and smoke on its way to Moscow.

It always thundered through Pushkino at this time, not stopping or slowing down, and dragging the sleeping cars over the points. It seemed to us all that the sleepers wanted to stay behind, to have a rest, but the locomotive relentlessly rushed them onward, refusing to let them have a breather.

The train came nearer. Suddenly a shudder ran through it. There was a clatter and the brakes went on. The rattle of the wheels ceased, and the train came to a standstill in the midst of the wood. The locomotive puffed like a broken-winded horse.

The train had halted just where it happened to be at the time of the funeral.

Steam burst forth in a mighty stream from the bowels of the locomotive, and the locomotive shrieked. It went on shrieking on one and the same note, and in that shriek could be heard despair, anger, and a challenge.

The mighty sound flew far and wide — into the wood, into the frost, into the fields covered with a pristine layer of frozen snow.

The minutes went by, and the train still shrieked in the same anguished way, just as sorrowfully and persistently, announcing that at

this very time Lenin's funeral was taking place in Red Square.*

The express had sped across thousands of miles of the great Russian winter, but it would be late. Forty minutes late.

I thought I could hear not only the howl of the Siberian express, but the cry of all Moscow. At that moment life stopped still. Even sea-going ships heave to and agitated the ferocious winter water with the wailing of their powerful sirens.

The hooter suddenly shut off, and the train steamed off into the distance, towards nearby Moscow.

It was all over. I made my way back home.

On the cottages mourning flags hung limp.

As I walked back I did not meet a soul. I had the strange fancy that all the world had died and that all life had dried up, like the last cheerless light of that January day with its absolutely unwanted frost and pungent smell of smoke.

That evening Zuzenko returned to find me in a feverish delirium. I was ill for more than a month.

* Lenin's funeral was held on January 27, 1924.

Cookery

Five Varieties of Borsch

MOSCOW BORSCH

For 4 portions:

1 lb rib of beef
 3 1/2 oz streaky bacon
 2-5 sausages
 2 oz butter
 10 medium beetroots
 1/6 head of white cabbage
 1 large carrot
 1/2 root each of parsley and celery
 1 onion
 2 1/2 Tbs tomato purée or 2-3 fresh tomatoes
 1 1/2 tsp granulated sugar
 a few drops of lemon essence
 salt, bay leaf, peppercorns to taste

Make beef stock, remove meat, then boil bacon in stock.

Peel beets, then cut 5 or 6 of them into small strips, place in a saucepan with a little of the butter, add 1 1/2 breakfastcups stock, lemon essence, 1 Tbs tomato purée or 1 peeled fresh tomato cut in sections (dip in boiling water to make peeling easier) and, stirring from time to time cook on a low gas (45 minutes for

old beetroots, 10-15 minutes for new ones).

With remaining beets make an infusion as follows: grate beets coarsely, pour on 1 bkfst cup hot stock, add lemon essence and bring to the boil once rapidly. Remove saucepan from gas, allow beetroot to stand for 20-25 minutes, then sieve.

Cut carrot, parsley root, celery and onion into strips, fry lightly in butter, then add to stewed beetroot and cook for 10-15 minutes until done.

Add chopped cabbage to sieved and boiling stock. When the stock comes to the boil again, add cooked beetroot, onion, parsley root and celery, and simmer for another 25-30 minutes on a low gas.

About half-way through add bay leaf, pepper, salt, sugar, tomato purée or fresh tomatoes, skinned and cut in sections.

Before serving put pieces of boiled meat into the borsch, and

also bacon and slices of boiled sausages. Add beetroot infusion and bring the borsch rapidly to the boil once again.

In 15-20 minutes, when the

borsch has absorbed the beetroot infusion, serve it with sour cream, parsley leaves, dill and vatrushkas (savoury buns with a cottage cheese filling).

UKRAINIAN BORSCH

For 4 portions:

1 1/4 lbs rib of beef
 10 beetroots
 1/2 head of white cabbage
 1 carrot
 1 small parsley root
 1 onion
 4 potatoes
 3 1/2 Tbs tomato purée or 2-3 fresh tomatoes
 3-4 cloves of garlic
 2 oz pork fat
 1 sweet pepper
 a few drops of lemon essence
 bay leaf, peppercorns, salt and sugar to taste

Prepare beetroot, carrot, parsley root and onion as for Moscow borsch.

Make beef stock and remove meat from it. Put into the boiling stock coarsely chopped cabbage,

potatoes and sweet pepper. When the stock comes to the boil again, add stewed beetroot, onion, carrot and parsley root. In 10-15 minutes add bay leaf, peppercorns, salt and sugar and simmer with the lid on over a low gas until potato and cabbage are cooked (20-30 minutes).

Five minutes before the borsch is done add garlic grated with two thirds of the pork fat, putting the rest of the pork in the borsch in small pieces, and also tomato purée or peeled fresh tomatoes cut in sections.

Before serving add the beetroot infusion and pieces of boiled meat and bring the borsch rapidly to the boil once again. Remove from gas and leave to stand for 15-20 minutes.

Serve with sour cream, garlic, parsley leaves, dill and vatrushkas.

BORSCH WITH DRIED WHITE MUSHROOMS AND PRUNES

For 4 portions:

12 dried white mushrooms
 20-25 prunes
 5-6 beetroots
 1/2 head of white cabbage
 1 carry*

1/2 parsley root
 2 large onions
 2 1/2 Tbs tomato purée or 2-3 fresh tomatoes
 3 Tbs vegetable oil
 a few drops of lemon essence

salt, bay leaf, peppercorns and sugar to taste
1 clove

Wash mushrooms in warm water and place in saucepan. Add halved onion and salt, pour on cold water and cook on a low gas for 2—2½ hours. To speed up matters the mushrooms can be soaked beforehand for 1—2 hours in cold water, which is then used to boil them in.

Stew beetroots as for Moscow borsch. Cut onion, parsley root and carrot in strips, lightly fry in oil, and then add them to the stewed beetroot 10—15 minutes

SUMMER BORSCH

For 4 portions:

6 young beetroots
4 potatoes
1 carrot
1 stalk of celery
½ lb vegetable marrow
2 tomatoes
3 oz spring onions
salt, pepper bay leaf and clove to taste
mushroom stock

Remove stem and leaves from young beetroots. Cut the beets

COLD BEETROOT SOUP

For 4 portions:

12 small beetroots
4 tsp granulated sugar
4 eggs

before it has finished cooking.

Sieve mushroom stock and while it is boiling add chopped cabbage. When the stock comes to the boil again, add stewed beetroot, onion, carrot and parsley root and simmer with the lid on over a low gas for another 25—30 minutes.

Half-way through add prunes (previously washed in warm water), finely chopped boiled mushrooms, salt, bay leaf, peppercorns, sugar, clove, tomato purée or peeled fresh tomatoes.

Leave borsch to stand for 15 minutes and serve with sour cream, parsley leaves and dill.

into strips and the stem in short pieces. Add finely chopped carrot, place in saucepan and cover with boiling hot or warm mushroom stock, then cook on a medium gas. Scald finely chopped beet leaves, peel marrow and cut into small pieces, and add these to the saucepan together with chopped tomato, potato, celery, spring onion, salt, pepper, bay leaf and clove, and simmer until done. Serve with sour cream, boiled milk or yoghurt.

parsley or dill to taste
a few drops of lemon essence

Carefully wash beetroots but do not peel. Boil until tender in water to which lemon essence has been added. Then cool, peel beets, and sieve liquid. Cut beets into strips and return to liquid, add

sugar, chopped hard-boiled white of egg, chopped lettuce, spring onions, and also finely chopped cucumber. Add sour cream, and before serving sprinkle with finely chopped parsley and dill.

Diced boiled potatoes and sliced and peeled apple may also be added.

ALL BUTTONED UP

It is not clear who exactly invented buttons, but they have certainly existed for thousands of years. The inhabitants of the ancient island of Crete fastened their skirts with buttons, and these convenient items were also well-known to the ancient Greeks.

In the Middle Ages buttons were used comparatively rarely, and then mainly as luxury decorations. In the sixteenth century they staged a comeback into everyday life — contemporary historians recorded that people tried to acquire as many as possible for their clothes.

The French King François I, for example, had a tremendous passion for buttons, and once he commanded the court jeweller to make 13,600 little gold buttons to trim just one suit of black velvet. And the Hungarian King Rudolph II ordered an incredible number of valuable buttons from Spain for his wardrobe — so many that he emptied the state coffers a great deal.

Sixteenth-century courtiers fastened their doublets with at least 14 buttons — and sometimes as many as 34. Apart from that there might be a dozen buttons on each sleeve.

* * *

Anatoli Bogatkin is the first man ever to have crossed the Carpathian and Caucasian mountains and the Karakum Desert on a bicycle.

Fifty-four-year-old Bogatkin cycled 25,178 miles round the Soviet Union between June 1965 and October 1968.

From ZABAİKALSKI RABOCHI (Transbaikalian Worker)

* * *

Paul Erlich, the German chemist, was the traditional, absent-minded professor. He used to send his associates cards with his instructions for the day. He wrote similar cards to himself, but for fear of forgetting them, he addressed them to himself through the mail.

Is there hope that the influenza virus may be defeated?

There is already a vaccine which has helped considerably, but now radically new prospects have been opened up.

Virologists working at the Epidemiology and Microbiology Institute in Moscow have recently produced a new form of vaccine which they claim provides immunity to influenza and also to a number of other virus diseases.

Fighting A Mass Killer — Flu

from the Soviet Press

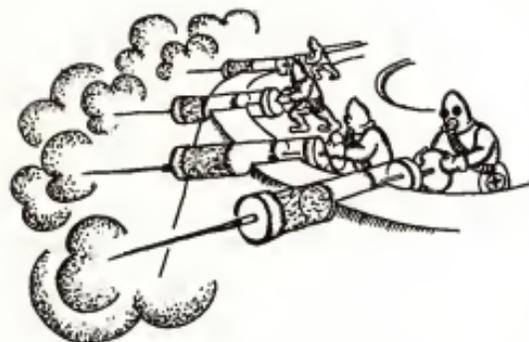
Twenty million people died during the worldwide influenza pandemic in 1918-19 — six million more than were killed in the first world war — and the death toll in the 1957 pandemic was two million. The lethal results of the "Hong Kong" flu are not yet known but they will not be comforting.

The secondary effects of influenza cannot be adequately assessed but they must be very serious. Each bout of flu leaves its mark on the heart, blood vessels and nerves of the victim and opens the way to many chronic diseases. Only cancer and cardiovascular diseases kill more people than influenza, and flu has no equal when it comes to residual disabilities.

The influenza virus is transferred from one person to another by direct contact and it spreads very easily. The faster man travels, the more quickly does an epidemic spread. In the eighteenth century diseases travelled at the speed of the mail coach; in the nineteenth century they crossed continents as fast as a locomotive and today they can move the speed of a jet plane.

"Asian" flu broke out in China in March 1957. By April and May it was prevalent in Central Asia and Eastern Siberia and it reached most of the European countries between June and August. By the end of the year every continent had been hit.

"Hong Kong" flu, the most re-



cent pandemic, started in August 1968 when half a million people in Hong Kong went down with it. It spread rapidly across the Pacific, reaching Australia and America, and by December it began to assail Europe. Such a rate of spread of flu is unprecedented and the disease has become a worldwide scourge.

From the writings of Hippocrates, Titus Livius and Diodorus Siculus it seems that influenza was known in antiquity but scientific investigation of the disease did not commence until the beginning of this century. By the early thirties something of the actual nature of flu was discovered and its pathogene, a strange virus, was isolated.

This virus still puzzles scien-

tists, for it does not conform to existing ideas at all. Its genetics apparently challenge the Mendelian laws which govern all other viruses. It has chameleon-like qualities which enable it to change its form to meet any immunity man may develop.

The most serious epidemics of the past 35 years have stemmed from transformations of type A virus. The 1918-19 epidemic was caused by subtype A₀ virus and this subtype persisted until 1947 when it was superseded by subtype A₁. This remained active until 1957 when the "Asian" flu started with the subtype A₂ variant. And another variant of the same A₂ virus caused the recent "Hong Kong" flu, too.

It seems that there is a limited

number of variants of the flu virus, each of which persists for a certain period and in a strict sequence. There are some interesting facts to support this theory. Throughout his lifetime a man's blood retains anti-bodies which his organism has produced to defend him from infections and each type of anti-body relates to a specific virus.

The blood of one-year-old children contains only antibodies against the virus of the "Hong Kong" flu ("A₂ — Hong Kong-69"). Twelve-year-olds have antibodies for both variants of the A₂ virus — the "Hong Kong" subtype and the 1957 "Asian" variety. Fourteen to eighteen-year-olds have an additional set of anti-bodies which provide an immunity to the A₁ virus and people who are more than twenty have anti-bodies for the A₂ virus as well.

The anti-bodies in the blood make it possible to draw certain conclusions concerning the nature of the flu epidemics a person has experienced. Blood of people of more than seventy years of age in 1957 which had been sampled prior to the "Hong Kong" pandemic revealed anti-bodies for the A₂ virus while the blood of younger people contained none. The virus "A₂ — Hong Kong-69" is apparently not new either, as its anti-bodies can be found in blood samples of people of over seventy, taken before the "Hong Kong" pandemic. This indicates that elderly people were exposed

to the same variant of the virus in their childhood. Scientists believe that the A₂ virus, which is associated with the 1957 pandemic, caused the 1889-90 epidemic which swept the world, and that a later variant related to the "Hong Kong" virus appeared at the close of the nineteenth century.

If the evolution of the flu virus does follow a "closed circuit" pattern and has only a limited number of variants which appear in a definite sequence it seems likely that the A₂ virus may disappear in a few years and the descendants of the A₀ influenza virus may come on the scene. Time will show if this theory is correct. It may be a frightening thought, but, on the other hand it may prove to be the means of defeating the influenza virus altogether.

About 35 years ago scientists observed that a person who had contracted influenza and recovered acquired immunity to the disease for a limited period. They therefore began working on the idea of developing a vaccine, containing enough of the virus to stimulate the organism into producing anti-bodies, without inducing the actual disease.

Some people thought that the only safe vaccine was a "dead" one, but this idea received little support when it was realised that a "dead" vaccine would not be effective enough. The extensive application of live vaccines against polio, mumps, measles and

German measles (rubella) established that live vaccines could be quite safe, and a live vaccine against flu was developed in the Soviet Union.

This vaccine was administered to the population annually and it reduced the incidence of influenza among those vaccinated to a half or a third. But for a long time it could not be given to young children because it produced serious side effects. This was a real setback because children are most prone to flu and are also the principal bearers of the disease so it was important to find some means of preventing the spread of an epidemic through children, but until very recently no solution had been found to this problem.

Seven years ago virologists in Leningrad developed a special vaccine to immunise children. It contained weakened viruses of all the modern flu agents. It went into mass production in 1969. But before handing the preparation over for general administration, the scientists made a thorough study of it.

Tests began in 1962 and have been carried out on 70,000 people. During the "Hong Kong" pandemic 20,000 children were the subject of an experiment in which half of them received the vaccine and the others were administered some vaccine-free material. No participant in the experiment knew what he was receiving so the results of the

study could be assessed with the greatest possible objectivity.

The experiment established that the children's flu vaccine is safe and even more effective than the adult type and, for preventive purposes it can be administered to children as young as one year.

Scientists working in Leningrad and Moscow have now developed an oral vaccine and if it proves as effective as the earlier one, which is given in a nasal spray, immunisation will become extremely simple and convenient.

Vaccination against flu is an important achievement but it is not the final answer. Each vaccine is effective only against a particular type of flu virus — A₀ and A₁ virus vaccines are useless in combating the A₂ virus and so on. The problem lies in the unpredictable factor of the flu virus. It is not possible to predict which particular subtype will appear and when. The vaccine prepared today may be powerless to protect man tomorrow. But if the idea that the flu virus has a "closed circuit" evolutionary process is proved correct and a full collection of these variants becomes available then it would be possible to develop an all-purpose vaccine.

In 1958 Alec Isaacs of the United States, discovered a protein compound in a virus-infected hen's egg, a substance which has been named interferon. Determining the role of this compound proved difficult, but in

1964, both Isaacs and Victor Zhdanov, a Soviet virologist, working independently, advanced the theory that interferon is no ordinary protein, but a new and unusual substance developed by the organism as a protective measure and recent experiments have shown that the interferon protects the cell from any virus infection.

The organism reacts to virus invasion by the rapid development of anti-bodies. Their job is to prevent the virus from invading the cell, but if, despite the action of the anti-bodies the virus does break through into the actual cell, then interferon is secreted. The individual cell dies but by its death it saves the lives of the surrounding cells.

The structure of interferon is simpler than that of the anti-bodies and its discriminatory powers are poor. Unlike the anti-bodies, which form in response to a very specific kind of a virus, the production of interferon is stimulated by any virus. In other words, interferon will attack any one of the subtypes of the influenza virus. With this in mind it is easy to agree with the statement of Vladimir Kuznetsov, head of the Moscow laboratory which has pioneered the mass production of interferon:

"Just as penicillin opened up the era of antibiotics, I am sure that interferon will herald an era of quite new anti-virus preparations."

Scientists have reached a number of conclusions about interferon after studying healthy people and those suffering from flu; some people develop more interferon than others and do it faster, and the tissues of both infants and elderly people produce less of this substance than those of the young to middle-aged. They also noticed that the mucous membrane cells of the upper air passages develop more interferon in the warmer months than they do in cold weather, and that where the formation of interferon is more intense the flu is lighter.

These observations led them to the idea of using synthesised interferon as a means of prevention and treatment in relation to flu. Many problems had to be overcome before a method was developed to produce pure non-toxic interferon but success was finally achieved and the Moscow Institute of Epidemiology and Microbiology has set up the world's first laboratory for the biological synthesis of interferon. It is manufactured from the leucocytes of donor blood. Many experiments were carried out over a period of two years on 400 volunteers who were infected with weakened flu virus to determine the dosage of the man-made preparation and the period and effectiveness of its action.

Wide-scale clinical investigation of interferon commenced in 1968 on localised outbreaks of flu, and then early in 1969, when



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the "Hong Kong" pandemic struck, about 16,000 people took part in the experiment. Interferon was used for both prevention and cure and in both cases the results were good. The incidence of flu was two or three times lower among those treated with interferon and when these people

did develop flu the attack was much lighter.

As interferon is a product of normal cell activity and is obtained from living human tissue — the leukocytes — it can be administered with perfect safety to people of any age and with any chronic disease.

HYPNOSIS MACHINE

A new physiotherapy apparatus (LIDA-3) designed at the Medical College in Kishinev treats insomnia, hypertension, child-stuttering and certain other functional disorders of the nervous system. It uses a kind of electro-hypnosis. Without touching the body, it induces a profound sleep within a few minutes, so lowering the patient's blood pressure.

THE DEADLY NARCISSUS

Many flowers are completely incompatible when placed in the same vase. Deadly dramas take place.

Mignonette will begin to wilt after half an hour in the same vase as a rose and the poisonous substance which lily-of-the-valley secretes immediately another flower is placed with it kills the intruder. Narcissi have the same effect on forget-me-nots.

Roses and carnations both lose their fragrance if they are in a mixed bowl, and soon begin to wilt.

Another interesting thing about carnations is that they react very badly to noise. If they are near a radio they will soon wither.

From KOMSOMOLET'S UZBEKISTANA

Chukotka: Life and Letters

by Yuri RYTHEU

from the weekly LITERATURNAYA ROSSIYA



The Chukchi, numbering only 11,700 according to the 1959 census (but probably about 15,000 today), live in the north-easternmost corner of the Soviet Union, facing the American continent across a narrow strait.

Only 40 years ago they had no written language. Today many works of prose and poetry have been written and published in their own language. Yuri Rytheu, born in 1930, was the first prose-writer to emerge in Chukotka. When two of his books, *THE PEOPLE OF OUR COAST* and *FRIENDS AND COMRADES* were translated into Russian in 1953, delighted readers discovered a new world. Rytheu's heroes are the people of Chukotka, brave and unsophisticated, trustful and generous. Their heritage and traditions, joys and sorrows, form the theme of Rytheu's works.

Our first-form teacher was Tatso, a Chukchi. He still lives in Uelen and goes hunting sea lions. He has yielded his place at the blackboard to former pupils.

The wonderful world of letters was opened to us by the first Chukchi primer. It was followed by readers which taught us the elements of Chukchi grammar. Unexpectedly, we discovered many friends in our textbooks. A Chukchi name is firmly attached to its bearer. When we read "Tanat" we thought of the real Tanat, a mechanic at our Arctic station. Many years later, one of the authors of the early Chukchi textbooks, Pyotr Skorik, now Doctor of Philology and an honoured resident of Uelen, told me that in compiling the first reader in Chukchi he had used the names of his former pupils who had begun to learn to read and write in the Uelen school.

Skorik came to Uelen as a young man after finishing the Far Eastern Teachers' Training School. He was the teacher of Tatso, of our fathers and mothers, but before he could teach them, he himself had to learn the Chukchi language.

In our first form there were two Russian boys, Vladik Leontyev and Petya Pavlov. Since Tatso did not know much Russian they learned to read from the Chukchi primer. Besides, it was difficult to divide the class in two — Chukchi and Russian.

By the end of the school-year

the two Russian boys spoke, read and wrote Chukchi very well and we suddenly realised that we could manage in Russian.

They were our first teachers of Russian, which we are now proud to call our second native language, just as Chukchi is the second native tongue of the now grown-up Petya Pavlov and Vladik Leontyev.

On Leningrad's Nevsky Prospect, there is a remarkable building with a tower topped by a crystal globe.

It was the magic building from which poured books over the whole Soviet North, from the Kola Peninsula to Chukotka. Books in languages which only a short time before seemed fated to remain forever mute.

On the fourth floor of that building was the editorial office in charge of publication of textbooks for schools of the Far North. When I was a student, that editorial office was also responsible for fiction, translations into northern languages of books by Russian, Soviet and foreign authors. That office also produced *Chychetkin Vetgav* (Native Tongue), which first published my early verses in my native language.

Translations revealed to us the riches of our own languages. Before, we had sometimes doubted if they could rival Russian in wealth and flexibility. But Russian helped us to uncover the untapped potentialities of so-called "primitive" languages. It

turned out that Chukchi had, in a way, anticipated the flood of new concepts which was touched off in Chukotka not only by material changes, but by cultural and social changes as well. When it came to translating the Constitution of the USSR into Chukchi the translators coped excellently with this difficult task — and the formulations allow for no ambiguities in meaning.

The Chukchi language gave birth to words which required no explanation. There is no finding the man who first spoke the words "rinenen" (aeroplane), "vanenan" (sewing machine), "tylechghin" (engine) — hundreds of new words which hitherto lay dormant in the storehouse of the language.

Life was pushing forward the accumulations of vocabulary which had stood still for centuries. From Russian we borrowed only those words which there was no point in coining.

Russian served not only as a source of borrowing. It became the language of communication between Chukchi and Russian, Chukchi and Eskimo, Chukchi and Even. In other words, it became the common language of all the people who live in Chukotka.

The learning of Russian made life easier, for instance, in the village of Nelemnoye, in the lower reaches of the Kolyma River. From time immemorial, Yakuts, Chukchi, Evens and Yukagirs have lived in the settlement. Everyone in that village

had to learn four languages. Now this is no longer necessary — the little citizens of Nelemnoye learn Russian in kindergarten.

Today it is unlikely that you will encounter anyone in Chukotka who cannot express himself in Russian at least to some degree. The only exception might be the older generation living deep in the tundra. For the rest of us, Russian has become a second mother tongue, as it has for all non-Russian Soviet peoples.

Marriages between Chukchi, Eskimos and Russians are quite common in Chukotka. Normally children in such families begin to talk two languages simultaneously, without any difficulties.

* * *

The evolution of my language has led to the emergence of an original Chukchi literature. Poetry by Victor Keulkut, a professional Chukchi poet, who unfortunately died very young, has long been a favourite in Chukotka.

Recently, Antonina Kymyrtva published a collection of poems, *Gynyky* (To You), which reflects the fine lyricism, tenderness and profound loyalty of the Chukchi woman.

Books in Chukchi are growing in number and size of editions. Nearly every year a new title appears in the author's lists.

Like other northern peoples, the Chukchi have no classical

literature of their own. We have to create it. So we turn for inspiration to the wealth made available to us through literacy: we turn to the achievements of world culture. The classics of literature have revealed to us the multifaceted nature of the world, the profundity of the human soul, and have forced us to give thought to our own place in the scheme of things...

The cultural advance of the Soviet Union's small nationalities has never proceeded in isolation from that of the whole country. The northern writers, I am sure, would have been unable to create their works without drawing on the overall experience of the multinational Soviet literature.

It is interesting to note that when a cultural revolution was launched in Chukotka, there were those who expressed fears that the general spread of education and European culture might deprive numerically small peoples of their unique traditions and native culture. They were afraid that widespread learning of Russian would mean the end

of the Chukchi language. But all these fears proved groundless. On the contrary, our peoples have become spiritually enriched.

All my books are about this rebirth of the northerner, about the changes in his life and thinking. At the start of my career I was gnawed by doubts: would my writings be of interest to readers in other parts of the country? Perhaps, I thought, my books could only be good for "internal consumption". Later I understood that there cannot be "narrow" literature of this kind. I realised that real literature is for all humanity. On the other hand, I understood that the more profoundly a work of art reflects the spiritual life of its people and their history, the more accessible it is to all mankind.

When I think and write of the progress of my people, I always think of it as the triumph of the Leninist nationalities policy, which makes no distinction between great and small peoples and offers to all of them unbounded opportunities for advancement.



Warning Clues to Earthquakes

by Anatoli YERSHOV

from the magazine ZNANIYE—SILA

At a recent meeting of a seismology session sponsored by the Uzbek Academy of Sciences a recording was played which interested the scientists so much that they extended their schedule to hear a re-play. What they heard sounded like distant artillery salvos, peals of thunder and the rumble of an express train speeding through a tunnel. It was a recording made of the rumbles deep in the earth, 1,650 feet beneath the city of Tashkent, capital of the Soviet Republic of Uzbekistan. An instrument known as a geophone, a type of microphone, had been used to make it.

Deep down in the earth sounds close to the lower threshold of human audibility are generated. These sounds reach the surface although seismographs fail to register the tremors they indicate. Before the earthquake which

devastated Tashkent in April, 1966, people on the northern outskirts of the city had often heard strange noises beneath the basements of their homes. Apparently these noises were produced by minor rock displacements which were not registered on the seismographs.

But these sounds were caused by the earthquake itself. Scientists believe that early warning of earthquakes is given by the sounds of the first small ruptures of subterranean rocks, but in order to cut out extraneous noise the geophones would have to be sunk in deep boreholes. This would be very costly, so it is unlikely that the method could be used except in special cases where a city stands above an earthquake epicentre.

A borehole 1,600 feet deep is already in use in Tashkent and

another, two miles deep, is being drilled. These will enable high sensitivity geophones to constantly record sounds in the danger area.

In 1966, soon after the terrible 1966 earthquake in Tashkent, an interesting phenomenon was noted by V. Mavashev, an engineer working in the Semashko Institute of Physiotherapy and Health Resorts in Moscow. Analysing samples of Tashkent mineral water to calculate the radon content he observed that this had dropped sharply after the earthquake. A study of the records over the previous 10 years indicated that the radon content increases with an earthquake approaching. This

may be regarded as an earthquake warning.

Now the Seismology Institute is conducting constant automatic measurements of the radon content of the water, and it has been found that the stronger the coming tremor, the greater the accuracy of the prediction.

Other curious phenomena have turned out to be part of an "early warning" system. There is a small rise in the level of natural radioactivity before a tremor, according to research workers in Azerbaijan, and in similar conditions there are changes in the negligible concentrations of mercury vapour in the soil.

Kaiser Frederick II fancied himself a deep thinker and enjoyed posing all sorts of tricky questions to the members of his Academy of Science. One day he inquired:

"Why is it that a glass of champagne rings truer than a glass of burgundy?"

Professor Sultzer gave this reply on behalf of his colleagues:

"In view of Your Majesty's meagre allowances to your Academicians, we are, unfortunately, deprived of the opportunity to stage such experiments."

* * *

Leo Tolstoy once wrote a short story and mailed it to the editors of a magazine under a pseudonym. A fortnight later he called at the editorial office to find out how things stood. The editor was rather harsh and curtly informed him that the story would not be published.

"Why not?" Tolstoy inquired.

"Well, I'll be quite frank with you, my dear fellow. When I read this nonsense, I was positive that you were a very green young man. But at your age it's a little late to start learning the craft. Have you ever tried writing anything before?"

"Oh yes, I've written a thing or two. War and Peace, Anna Karenina..."

Cleaning up the Effluent

Wherever industries flourish on the banks of rivers and lakes, all living matter in the water eventually perishes from pollution by effluent containing waste products, unless steps are taken to prevent this. Soviet scientists are striving to protect not only such special lakes as Balkal, but ordinary bodies of water as well.



by Nikolai CHISTYAKOV,
Deputy Minister for the USSR Cellulose
and Paper Industry
from the APN Newsletter

One cubic yard of untreated waste water from a cellulose factory is capable of removing the oxygen from 40 cubic yards of water, thus killing all living matter normally present in the river or lake, including water plants. At the same time, the industry is faced with the fact that the production of one ton of cellulose requires the use of from 200 to 500 cubic yards of water.

Modern factories use special filters, settling tanks and flotation traps to prevent cellulose fibre from being emptied into rivers and lakes along with waste water. But while the amount still remaining has been

reduced to one per cent — little enough when regarded as a production loss — it is sufficient, along with dissolved wood and chemical additives such as sulphur-containing by-products and mineral salts formed in the industrial process, to be a serious threat to river and lake water.

To cope with this problem, Soviet cellulose factories have since 1964 been equipped with supplementary purifying plants, developed by research institutes into a whole system of complex cleaning of waste water, involving not only mechanical purification in settling tanks but subse-

quent biological processing and clarifying.

Biological processing is the most important part of the system. Air is pumped into huge tanks filled with contaminated water, into which are also introduced salts of nitrogen and phosphorus, on which bacteria feed. The bacteria also assimilate the organic substances remaining after the processing of the wood. These and other micro-organisms, activated sludge, as it is termed, in fact, are present in all natural bodies of water, where they similarly digest organic substances, a process requiring the presence of oxygen, also needed by fish and water plants.

Waste water from a cellulose factory contains in solution a concentration of many substances, so that the purification process requires many bacteria and much oxygen. Scientific control of the process now helps to ensure protection of the rivers and lakes, instead of relying upon natural processes.

This activated sludge expands in volume and grows heavier, like all living matter. Eventually, too much sludge accumulates, and as it cannot be dumped into the fresh water because the dying bacteria would use up some of the oxygen in the water, the surplus is frozen and dried.

This is the process normally used for all rivers and lakes, but in exceptional places more expensive multi-stage systems involving the use of chemicals are employed. Lake Baikal in eastern Siberia is one of such places. It is the largest body of fresh water in the world and is

noted for its purity. Now that the cellulose industry has been established on its shores, special measures are being taken to make sure that the priceless purity of the water is contaminated as little as possible by industrial waste. These measures enable the removal of as much as 96 per cent of poisonous substances in waste water resulting from cellulose manufacture.

The purifying plants in this area are impressive structures of reinforced concrete, with a capacity of 160,000 cubic yards of solution. Emergency tanks and reservoirs bring the total volume of the structures in the system to a million and a half cubic yards, and all this naturally adds to the cost of cellulose manufacture. For instance, the investment of capital in the biological processing plant amounts to 5-10 per cent of investment in the whole enterprise, and running costs take up 1.5 to 2.5 per cent of the cost of the ready products. All the same, we are not deterred by this; these additional costs are a necessary tribute for the protection of nature, and we do not have the right to refuse to pay them.

Soviet scientists and engineers are constantly searching for improved and more economical means of water purification; they continue to develop new systems and equipment, and even more important, they are seeking means of re-using purified waste water in industry instead of releasing it into a lake or river.

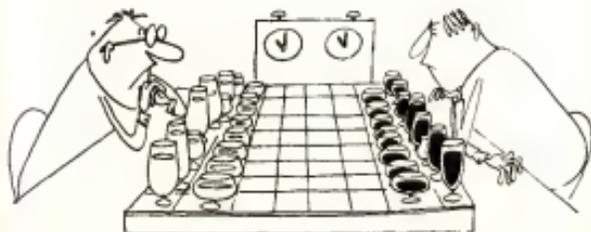
In a year or two it is expected that Soviet cellulose factories will

be employing special thickeners for waste, utilising it in some form or another. For instance, the fine-grained lignin, the sludge remaining after chemical treatment, can be used in the rubber industry, experiments conducted by the Kirov Timber Industry Academy in Leningrad revealing that car tyres made from rubber containing the alkaline lignin give better service.

Surplus sludge can also be used as an organic fertiliser, and researchers are investigating whether it can be used as a vitamin additive to fodder.

Carrying out research at Lake Baikal, Professor Yelpidifor Veselov

of Petrozavodsk University is trying to pinpoint what substances and how much of them exercise a deleterious effect on the lake's plant and animal life. After placing fish, plankton, small animals and water plants in a nursery pond containing purified factory waste water, he gradually diluted it with Baikal water to determine the amount of dilution needed to ensure that living matter would not be harmed. It has been shown that the dissolved salts present no danger, but only the sulphurous compounds are harmful, so now we are trying to eliminate these from the cellulose factory's waste water.





THE PASSING OF THE YEARS

by **Yakov SEGEL**
from the weekly
LITERATURNAYA
ROSSIYA

April 1941

"Hallo . . ."
"Hallo. I'm eating such a wonderful apple . . ."
"What's that?"
"A wonderful apple . . ."
"Who do you want?"
"You."
"Who are you?"
"A girl."
"Anyone I know?"
"No, but I've seen you a couple of times. I just felt like giving you a ring."
"To say you're eating a marvelous apple?"

"That's all."
"H'mm . . . You've got a smashing voice."
"Thanks. Time to ring off . . ."
"So soon? But what did you ring for?"
"To see what you sounded like."
"That's all?"
"That's all. Cheerio!"
"Wait a minute. Don't hang up. You've got a smashing voice!"
"You said that once. Good-bye . . ."
"If you hang up I'll lose track of you."

Yakov Segel was born in 1923, and grew up in Moscow. When he finished school in 1941 he went straight off to the front, where he fought in the parachute troops. After the war he went to the State Film Institute and trained as a film director. His best-known films are "The House I live In" and "Goodbye Doves!" Apart from that, he has also won a reputation as a short story writer.



"Well, it wasn't you who found me, but the other way round."
"Oh come on, at least tell me your name."
"Well, it won't mean a thing to you, but it's Katya, Katenka, Ekaterina, whichever you fancy, most."
"What do you fancy most?"
"None of those, actually. I prefer Karina."
"All right . . . Karina, can I ring you up?"
"No, you don't know the number."
"Give it to me then."

"No."
"All right. But give me a ring, O.K. Karina?"
""
"Hallo, hallo, are you there?"
"Yes."
"What's up?"
"I'm thinking . . . All right. I'll ring you."
"Same time tomorrow?"
"All right. At six tomorrow."

Tomorrow at Six

"I'm eating a wonderful apple. Hallo!"

"I've been sitting by the phone for half an hour."

"You said six, and six it is."

"Thank you."

"Not at all."

"Karina . . ."

"What?"

"If I ask you something, will you answer?"

"Depends on the question. Try it."

"How old are you?"

"Sixteen. Well, nearly sixteen. And you're seventeen and your name's Misha . . . And you live at 23 Petrovka Street."

"How do you know all that?"

"I know everything about you . . . or nearly everything."

"It's not fair."

"Why?"

"Because you know all about me, and I don't know a thing about you. Are you tall?"

"Middling."

"Beautiful?"

"Very middling. I must go now."

"One minute. When will you ring me again?"

"Why should I?"

"Because. When?"

"Don't know."

"Why don't you give me your number? Come on!"

"....."

"Thinking again?"

"Oh, all right. Write it down: 52689."

The Same Day: 6.10 p.m.

"Is that directory enquiries?"

"Yes, what can I do for you?"

"Well, you see . . . I already know the telephone number, but I want to know the address."

"I'm sorry, but we don't supply such information."

"But I need it so much."

"Sorry, but we can't do it."

"What can I do then?"

"Afraid I can't help you, subscriber. Maybe you'll search through the telephone directory."

"It'll take years!"

"Nothing I can do, subscriber."

Two Days Later

"May I speak to Karina, please?"

"No one of that name on this number."

"There must be . . . A girl of about 16!"

"Oh, that must be Katya Gradova. Thinking up fancy names for herself. Karina, indeed! Katya . . . Katya!"

"Hello."

"Karina? It's me."

"I thought so."

"She didn't know who I wanted when I asked for Karina."

"You're the only one that knows. It's my secret."

"All right. I won't give you away . . . I know your surname, too, now, Gradova, that's right, isn't it? Now I can get your address from directory enquiries. If I give them your name, they'll give me the telephone number and the address."

"Don't do it, please . . . Oh, well, you can if you like. You

won't get anywhere. The phone's not in our name."

"So I suppose I'll just have to wait."

"Why should you?"

"You've got such a smashing voice . . . I want to see what you look like!"

"I told you, very middling."

"It doesn't matter."

"No, word of honour, very middling. Even very, very middling. Goodbye."

Another Few Days Later

"Karina, please."

"Who?"

"I mean Katya . . . Katya Gradova."

"These fancy names they think up for themselves! Katya's out."

Another Few Days Later

"May I speak to Katya Gradova, please?"

"All the Gradovas are out."

Another Few Days Later

"May I speak to Katya Gradova, please?"

"This is her mother, Katenka's gone to her grandmother in the country for the summer. I'll be writing in a couple of days. Any message?"

"Just tell her Misha rang, please."

End of June, 1941

"May I speak to Katya Gradova, please?"

"I don't think she's here."

"Then her mother, please . . ."

"Just a minute."

"Hallo."

"Hallo! Is that Katya's mother?"

"Yes. Have you heard from Katya?"

"No. Do you remember me? I rang not long ago."

"Oh, yes, I remember. Katya's coming from the country tomorrow. Ring her tomorrow."

"I can't tomorrow . . . I'm going away."

"Being evacuated?"

"No, going to the front. I'm off tomorrow. Give Katya greetings from me. And my best wishes to you."

"My best wishes to you, young man . . . What did you say your name was?"

"Misha."

Over Four years Later

"May I speak to Katya Gradova, please?"

"Who?"

"Katya Gradova."

"There's no one of that name here."

"She used to live there, before the war."

"Just a minute. I'll ask one of the neighbours."

"Hallo. Can I help you?"

"I'm looking for Katya Gradova."

"She left here four years ago. First she was evacuated, and she's never been back here since."

"So she's not in Moscow?"

"She is. Only after the father was killed they stopped coming back to this flat. She lives with her husband's family. Had the baby there. Her mother went to live with them, too."

"Have you got her telephone number?"

"Just a tick. It's scribbled on the wall somewhere. Ah, here it is: 830168..."

The Same Day

"Is that 830168?"

"Yes."

"May I speak to Ekaterina Gradova, please?"

"She's not Gradova now, she's Zemtsova. That's me. Hallo, Misha."

"How did you know who it was?"

"Easy!"

"More than four years, nearly five, yet you recognised my voice."

"I did — and I'm very glad that you're..."

"Alive?"

"Yes, and that you've rung."

"You've got the same voice as then."

"It can't be four and a half years ago!"

"More, nearly five... So you're... Zemtsova now?"

"Yes, I'm married."

"I know. And I know you've got a baby, and that your mother lives with you, and that this is your telephone number... And... well... that you're married."

"All correct. Now you know everything about me and I know nothing about you."

"What's there to know. I'm like the rest. Fought at the front. Was wounded twice..."

"Badly?"

"Once rather badly. But it all healed up. The way it does on a dog. What else? Well, was demobbed, and went back home. It seems I've grown. My mother kept all my things — suit, shirts, shoes — and they were all miles too small. Couldn't get anything on or do anything up! Comic the way I've grown."

"Nearly five years, just think of it."

"And in the pocket of my old suit I found a notebook with your old telephone number in it. I got through, and they gave me this number. So now I'm ringing you."

"Thank you..."

"And now you're married..."

"Well, it's been a long time."

"You sound almost apologetic."

"Sheer accident."

"Do you love your husband?"

"Very much. He was very badly wounded, too. And I love my son, and they both love me."

"Karina..."

"....."

"Karina, may I see you?"

"....."

"Why don't you answer? Are you thinking?"

"No, I've already thought it all over."

"You've such a beautiful voice."

"All the more reason why we shouldn't meet."

"Why?"

"Well, you think of me as a beautiful voice, and that's very nice. Oh, how can I explain to you? You think of a beautiful voice and you probably think I'm something special, too. Do you follow me?"

"Not very well."

"You will some time. And now let things be as they were years ago: Once upon a time there lived Karina, a girl with a smashing voice."

"....."

"You see, now it's you who don't answer!"

"Now I'm thinking."

"Best wishes, Misha. Enjoy life!"

"Don't know if I can, but I'll try..."

"You will. Let's say goodbye now."

"Karina, say something nice to me, just to finish off."

"What, for instance?"

"What you like... the nicest thing you can think of..."

"I'm eating a wonderful apple..."

GOLDEN SCULPTURE

Not all nuggets of gold are smelted down. Some, shaped by the artful hand of nature herself, go into collections.

One such collection in Moscow recently acquired from the gold-fields of the Far North a "duckling" and a "bison" of pure gold. The collection includes a "bust of Mephistopheles" weighing two-thirds of an ounce, a "camel" weighing about two pounds and a "horse's head" weighing 30 pounds.

From ZNAMYA YUNOSTI

WHAT NEXT?

Chocolate raisins will be coming almost straight from the vine before long.

A new type of grape, the "Tairovsky", which has a somewhat chocolaty flavour, has been developed by the Ukrainian Grape-Growing and Wine-Making Institute. In future the scientists expect to obtain raisins and wine from the grapes which will have the same distinctive flavour.

From SELSKAYA ZHIN

by Igor BELZA

from the magazine YUNOST

Mozart and Salieri



PROFESSOR IGOR BELZA, NOTED SOVIET MUSIC AND LITERARY SCHOLAR, HAS COLLECTED A GREAT DEAL OF MATERIAL ABOUT MOZART'S DEATH, MAKING IT LOOK VERY BLACK INDEED FOR HIS ALLEGED POISONER, ANTONIO SALIERI.

For more than a century musicologists and literary scholars have been intrigued by the question whether Alexander Pushkin's famous tragedy *Mozart and Salieri* was based on fact or was simply a product of the poet's imagination.

Antonio Salieri, a mediocre musician, would have been long forgotten but for two associated factors. The first is that ever since the death of Mozart in 1791 there has been a persistent rumour that he was poisoned by Salieri, whose motive was supposed to be egoism and envy.

The second is that the rumour became a legend which finally won immortality when Pushkin used it as the theme of his tragedy, still a favourite of students and lovers of classical Russian literature all over the world.

The question has remained: was Pushkin using a mere rumour circulating in literary Europe in his day, or did he have something much more substantial to go on?

The latest research suggests that Pushkin, who was most meticulous about authenticity, especially when treating histori-

cal themes, did not depart from his well-known dictum: "It is not wise or generous to foist horrors on historical characters. I have always considered it unworthy to resort to calumny in poetic works." As Mozart and Salieri were, in fact, historical characters, that indicates that Pushkin was in possession of certain information giving him the right to reveal facts, disadvantageous as they might be for Salieri's posthumous reputation.

Salieri died in 1825, and Pushkin first formed the intention of writing the tragedy in the following year, when rumours were rife concerning the manner of Mozart's death.

Although all Pushkin's sources of information are not known, one seems more reliable than others — the St. Petersburg salon of Count Fickelmont, Austrian Ambassador to the Russian czar's court. The Count's wife, Countess Dolly Fickelmont, was a close friend of Pushkin, and the poet was also intimate with the count, who kept him up to date on all the news from Austria, and supplied him with Austrian publications. These discussed the recent death of the Austrian court kapelmeister, Salieri, and his alleged confession that he had poisoned Mozart.

But the rumours that Mozart had been poisoned had begun to circulate much earlier, right after the composer's death, when those few Viennese who were privileged to see his body were shocked

by its swollen condition, and the strange-looking rash covering it.

The mists of time began to shroud the facts in legend. Gossip and fact became mixed together in stories about Mozart's death, the secrecy of his funeral and the subsequent disappearance of his grave — and always Salieri's role was called in question.

For the latter, there was some reason, even before Salieri's alleged deathbed confession, and to this I can testify, as the following facts will show.

When I went to Vienna in 1947 to give lectures on Soviet music, I discussed Mozart with almost all the Austrian musicians I met, and we recalled time and again the notebooks Beethoven had left, and how he referred to Salieri's dying confession. The notebook entries were really records of conversations Beethoven had had with acquaintances, who had to write down what they wanted to say, because, as is well-known, the great composer in his later years was stone deaf. Reading these entries in their original German, I extracted the following:

In November, 1823, the Viennese journalist Schick said to Beethoven: "Salieri has cut his throat, but he is still alive." Later in the same year Schick said: "You can wager a hundred to one that Salieri's confessions are the truth. The nature of Mozart's death confirms them." Then, in the spring of 1825 (the

year Salieri died) Beethoven's nephew, Karl, said in an entry: "Salieri asserts that he poisoned Mozart."

About the same time, Schindler, who was Beethoven's biographer and one of his closest friends, said in the notebook: "Salieri is in very bad shape. He is depressed and delirious, and keeps repeating that he poisoned Mozart. It's true, because he wants to confess it. Thus every evil brings its retribution."

When I discussed the subject with Boris Kremnev, a Soviet biographer of Mozart, he told me that Beethoven had a personal interest in the question of Salieri's guilt, as it appeared that Salieri had persecuted Beethoven, too. In January 1809, Beethoven had told his Vienna publishers that among his enemies in Vienna, "Signor Salieri was the first". The Viennese music critic Franz Farga has stated that the "king of songs", Franz Schubert, was also a victim of Salieri's intriguing.

Some apologists for Salieri would have it that Salieri was insane when he tried to cut his throat in 1823, and put his confession of guilt down to his insanity, but a recently found letter of Salieri disproves this. Right from the first lines this carefully composed and thoroughly polished letter makes it clear that Salieri first decided to commit suicide as early as March 1821, two and a half years before he made the actual attempt. Yet during the whole intervening

time he continued to conduct the emperor's orchestra and his choir, so it seems that the plea of insanity does not stand up.

Hypotheses that Mozart died of tuberculosis, meningitis or nephritis are rejected by authoritative doctors and historians of medicine, who firmly assert that the cause of death was sublimate poisoning. Moreover, Dr. Dieter Kerner, an outstanding German physician, has shown conclusively that the toxic properties of sublimate are greatly increased if the poison is mixed with wine.

Corroborative evidence of Salieri's guilt, bearing on his character, is contained in a note in the autobiography of the Czech composer Tomášek, published more than a hundred years ago. Tomášek said that Salieri somehow or other had acquired manuscripts by Glück after that composer's death, and had passed them off as his own.

So the indications of guilt piled up with each passing year.

The question arises: did Mozart himself consider that Salieri was his assassin? I can cast some light on this, from my inquiries. In 1959 the diaries of the English publisher Vincent Novello and his wife came off the press in Britain, and among other things they describe a visit they paid to Mozart's widow in 1828. Frau Mozart stated in unequivocal terms that on his deathbed her husband had told her that Salieri had poisoned him.

The design on a postage stamp

issued in Austria in 1956 also bears witness to the widespread and profound nature, even now, of the belief that Mozart was poisoned. Issued to commemorate the 200th anniversary of the composer's birth, the stamp bears his portrait, and is ornamented by Mercury's rods. Mercury happens to have been the old alchemists' symbol for quick-silver — of which sublimate is a form — and the artist who designed the stamp said his whole idea was to emphasise what he believed to have been the real cause of Mozart's death.

Finally, there is the conspiracy of silence with regard to Salieri's music, which has been going on for more than a century among musicians the world over. In Salieri's lifetime there were many who considered him to be a

"unique composer" and even a great musician. Yet for more than a century now not a note of his music has been heard in world theatres and concert halls — as if Salieri had never composed anything. This conspiracy of silence on the part of musicians, which continues from one generation to the next, is like silent condemnation.

To return to Pushkin's tragedy. I feel it necessary to emphasise how discerning and wise was Pushkin's decision to make his Mozart the incarnation of noble ethical qualities. "Genius and crime are incompatible, two worlds apart..." he made Mozart say, and this is the central ethical concept of the work. Pushkin, as it were, prophesied immortality for Mozart's works, and oblivion for Salieri's.

MUSEUM PIECES IN MUSEUM FOUNDATIONS

Excavations for an art museum being built in Samarkand, Uzbekistan, have already produced more than 500 relics of the ninth to eleventh centuries B.C. and up to the time of Tamerlane (1335-1405) and his dynasty.

They include ceramics, coins, glass and metal vessels and chased copper objects. In addition, remnants have been found of a fired brick building, potters' kilns and workshops of ancient metal-workers.

Archaeologists have also discovered the bed of a large city canal containing fragments of pottery and metal articles.

From the newspaper KOMMUNIST TAJIKISTANA

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HOVANES TOUMANIAN

from articles
by Levon AKHVERDYAN,
literary scholar

Poet of the Armenians

*"Song shall reinforce us:
Hither it shall bring
Armenia's air and waters,
The flowers of her spring.
Give us brief escape . . .
From our bitter fate . . ."*

These lines are from the poem *Far From Home*, by Hovanes Toumanian, Armenia's most beloved and popular poet, whose birth centenary was celebrated late last year. The poem expresses a theme that recurs again and again in his works — his anguish for the fate of his people, for the eternal exile, the victim of perennial strife.

He was an intensely national poet, and because of this, because of his great concern that his people might at last live in peace, he was an intense internationalist, too, a passionate advocate of friendship among nations.

Toumanian was born in 1869 in Lori. His father was the village

priest. Of Lori another great Armenian poet, Avetik Isaakyan, has written: "It is a patriarchal world, a world of fairy tales and legends, every nook there is a cherished legend, every stone is witness to past history."

It was in this poetic, truly Homeric land that Toumanian grew up, and it left its mark on all his work.

Hovanes Toumanian went to school locally at first, and after that attended a religious seminary in Tiflis (now Tbilisi), which was then the cultural and administrative centre of the whole of Transcaucasia. He did not finish the seminary, partly because of lack of money, and he had no further

formal education. Instead he started work and spent hours of his spare time in libraries, adding to his knowledge tremendously, if somewhat unsystematically, by reading.

This was a terrible period in the history of the world as a whole, and of Armenia in particular. Not one moment in Armenia's history had been so dramatic, had concentrated such bright hopes within itself and such bitter defeats for those hopes as the last third of the nineteenth century and the first two decades of the twentieth. Toumanian was both eyewitness to and participant in the cataclysms, living through an appalling massacre of his fellow Armenians. He saw the Russian revolution of October 1917 as the way forward to the salvation of his people, and spent the few years of his life after it helping to build a socialist Armenia. (He died in 1923.)

He engaged in a great deal of activity outside his writing. It was on his initiative that the Caucasian Society of Armenian Writers was organised in 1912, and he remained its president until 1921. In 1912, too, he was arrested for anti-czarist activity.

After the revolution a number of societies were organised under his presidency, including the Society for Aid to the Victims of War, the Society for Aid to Soviet Armenia, and the Union of the Peoples of the East.

Apart from this, he was always helping individuals who ap-

proached him with all kinds of problems.

Contemporaries spoke affectionately of his generosity and charm, of his good-natured smile. He kept open house for his friends.

Toumanian wrote poetry, prose, lyrical verse, fables and ballads. He was a master of literary style, and his works have a unique flavour with his simple but lively and figurative language, his vivid and memorable imagery and gentle humour. In his works is Armenia itself, with its scenery, life, customs, popular legends, griefs and joys, ideals and dreams.

Armenian readers cannot remember exactly when they first get to know Toumanian, any more than one can exactly recall one's first impressions of early childhood. He appears to the young children as the spirit of goodness in the poems and tales their elders read to them, and then they go on to read him for themselves.

As adults they have quotations from his works constantly on their lips — not self-consciously, but as a natural and integral part of their lives.

One of Toumanian's greatest masterpieces is his *Anush*, a tragic drama of love written in the form of a lyrical poem in which he expressed his philosophy of life, his understanding of the world of human passions and his undying love for his native land.

His poems *In the Armenian Highlands*, *Armenia's Grief*, and *With My Homeland* had a decisive effect on the development of patriotic Armenian poetry. *Requiem* is a poem of great power written in the terrible days of the 1915 massacre, while his *David of Sasson* is a brilliant treatment of themes from Armenia's magnificent epics.

The Drop of Honey, based on a medieval fable, is an allegory telling of how a disastrous war breaks out over the spilling of a drop of honey. The few who survive ask each other:

"Tell me whence and when
and why
Came this great calamity?"

But Toumanian was not a pessimistic poet, and in his works, to use his own words, "with joy of glorious days to come inspired strings resound".

To him the highest meaning of creative work was to bring together people and nations. To him the supreme example of an artist who did this was Shakespeare, of whom he said: "At the same time he brings together all nations with the English and also with one another. In this lies the magic power of poetry and art in general."

All Toumanian's work was directed to this aim.

IN THE ARMENIAN HIGHLANDS

The way was heavy and the night was dark,
And yet we survived
Both sorrow and gloom.
Through the ages we go and gaze at the stark
Steep heights of our land —
The Armenian Highlands.

We carry from old our treasure,
Vast as the sea,
Brought into life
By the great soul of our people,
In our lofty land —
The Armenian Highlands.

How many times
The savage hordes
From the blazing desert
Tore and tormented
Our caravan
In our blood-smeared land —
The Armenian Highlands.

Yet, plundered and scattered,
Our caravan
Sought its way out
From among the rocks
Counting the scars of its countless wounds
In our mournful land —
The Armenian Highlands.

And we gaze with dolorous, longing eyes
At the earth in its gloom,
At the distant stars;
Ah, when will the dawn break at last
Over our green
Armenian Highlands?

WHEN SOME DAY

Sweet comrade, when you come some day
To gaze upon my tomb,
And scattered all around it see
Bright flowers in freshest bloom,
Think not that those are common flowers
Which at your feet are born,
Or that the Spring has brought them there
My new home to adorn.
They are my songs unsung, which used
Within my heart to hide;
They are the words of love I left
Unuttered when I died.
They are my ardent kisses, dear,
Sent from that world unknown,
The path to which before you lies,
Blocked by the tomb alone!

QUATRAIN

Many a hand set fire to me
And made me burn like a storm-lit tree.
Become a flame, I issued light,
Now spent and dried myself I be.

In my despair that knows no bounds
Profound and low, a voice resounds
In my alert and wakeful ears —
The call of death, my steps it hounds.

THE KITTEN'S COMPLAINT

In a corner of the kitchen
Hid a sadly sobbing kitten
And was found there by another:
"Tell me, what's the matter, brother?"
With his paw he brushed aside
A rolling tear, and then replied:
"Who's been telling tales to granny?
"I'm the victim of a slander.
"How could yoghourt by itself
"Vanish from the kitchen shelf?
"The evidence is clear enough:
"Amo gobbled up the stuff!
"Now the boy is artfully
"Laying all the blame on me!
"Granny and the dog and children
"All are hunting for the kitten,
"Searching for me high and low,
"Hear them shout: 'Where did he go?
" 'He'll know what he's punished for!
" 'He'll not pilfer any more!
"That is all. As you can see,
"Here is no mystery.
"It is Amo who is cheating
"But it's I who'll get the beating . . ."
The kitten dropped
His nose, and stopped,
And didn't say another word.
Only sobbing could be heard.



TER-OVANESYAN: 'BOB BEAMON CAN BE BEATEN!'

by Alexei SREBNITSKY
from the newspaper
KOMSOLOLETS KIRGHIZII

"If I thought that Bob Beamon couldn't be beaten I'd leave sport," said Igor Ter-Ovanesyan, Soviet and European long jump champion and ex-holder of the world record.

I was surprised. I remembered the last Olympic Games in Mexico City and the unbelievable leap by the long-legged, graceful American Negro — 8.90 metres (29 ft. 2 1/2 inches) — a phenomenal leap, the leap of the century. Sports experts immediately drew a parallel; Beamon's 8.90 was about the equivalent of 2.40 in the high jump. And I remembered the look of consternation on Igor's face, shown in a close-up shot on TV. He appeared to be severely shaken and in subsequent jumps failed to capture either a silver or bronze medal, though he had been a pre-Games favourite for the gold.

"Igor, are you serious?"

"Absolutely. Beamon's jump was a terrific shock to me. If he had jumped 8.50 or even 8.60, I wouldn't have been too upset. I expected some such result and had prepared myself for it. But 8.90 was too much — I lost heart, and when I returned to Moscow I decided to leave sport. Nobody could outjump Beamon, I thought then."

"And what changed your mind?"

"I calmed down and started working things out. Nine-metre jumps are rare events. I remembered the national athletics championship in Leninakan. In one of my jumps I barely scratched the plasticine strip on the plank. The jump did not count, but when they measured it the tape showed 8.67."

Igor Ter-Ovanesyan has spent 15 years in big time sport. When he began the Soviet Union long jump record was 7.50 metres and the world record was 8.13. A gap of 63 centimetres. Twice Igor shattered the world record; before Beamon's Olympic leap he shared the world record of 8.35 with Ralph Boston. And now again the Soviet national record is 55 cm. below the world mark.

"Igor, do you really think you can recapture the world record?"

"I'm not thinking of the record yet. All I'm saying is that Beamon can be beaten. And I plan to jump 8.70 this year."

"But you're already over 30, Igor. Isn't it a bit late for you to improve on your past performances? At your age many athletes lose something of their youthful speed, strength and lightning responses."

"You're wrong there. Physically I feel just as I did when I was 25. I put in a lot of training during the winter. Plenty of running. I'm in great shape now. What is more, we 30-year-olds have an important advantage over the youngsters: we understand more, we orientate ourselves better. A wealth of experience, numerous competitions against top athletes — this is a wonderful school. And we have learned a great deal from our coaches through the years, as well as picked up many things by ourselves. During the past few years

Bob Beamon (USA) who carried off the long jump championship at the Mexico Olympics.



SPUTNIK

Igor Ter-Ovanesyan, ex-holder of the world long jump record, gets in some training, hoping to break the record established by Bob Beamon.



I have been training myself without a coach. And I believe I can still find untapped resources and overcome some shortcomings in technique."

"That sounds a bit strange," I said. "After 15 years of training, after three Olympic Games and scores of major tournaments, you say your technique is not yet what it should be."

"That is the case," said Igor. "One example, the first that comes to mind. Just before the last step of my run I stall a bit and as we say, brake. This, of course, cuts down my speed. Now surely I can correct this fault."

"And how does Beamon develop his run?"

"Bob is unique. His physical qualities as a jumper are incomparable. He is tall, light, and right to the take-off he is developing speed as he runs. The last step of an ordinary jumper is about a shoe-length shorter than his preceding step. With Beamon it is the exact opposite — his last step is from 5 to 10 cm. longer. Any other long jumper would be unable to cope with such stress and strain falling on the kick-off leg but Beamon doesn't even seem to notice it. In the air he bunches up, his arms forward toward his out-

stretched legs. It's hard to understand why he doesn't topple over. But from the point of view of aerodynamics, his method is probably superior."

"And yet you think he can be beaten?"

"Well, I was just telling you about my plans," said Igor in a somewhat aggrieved tone of voice.

"What's new in your personal life?" I asked, sensing it was time to change the subject.

"Nothing startling. My son is getting big and my little girl is also growing fast. The Novosti Press Agency publishers are going to issue a book of mine — memoirs of my life in sports, my friends, various competitions."

I have known Igor Ter-Ovanesyan for many years and have always had a great respect for him, both as an athlete and as a man. It was painful for me when I saw him falter in Mexico City, hypnotized by Beamon's fantastic leap. I don't know whether Igor (who still leads the European jumpers) will succeed in equalling or beating Beamon's record. But the fact that our veteran champion has recovered from his knockout at Mexico City and is looking forward to a return match increases my respect for him.



Crime and Punishment

by Mikhail Zinevych
from the magazine
SOVIETSKY EKRAK
(Soviet Screen)

"On an exceptionally hot evening early in July a young man came out of the garret in which he lodged in S. Place and walked slowly, as though in hesitation, towards K. Bridge."

On location during the shooting of "Crime and Punishment".



On an early morning late in September, when the sun was still dazzlingly bright but the air was already nippy, I met, outside the Hotel Oktyabrskaya, the film crew of the Leningrad Gorky Film Studio which was shooting *Crime and Punishment*. A few minutes later we climbed into buses and set off for the Krasnogvardeisky Bridge. In the bus with me, was a young man who strikingly resembled Dostoyevsky's Rodion Raskolnikov: "... he was ... exceptionally handsome, above the average in height, slim, well-built, with beautiful dark eyes and dark brown hair ...

"He was so badly dressed that even a man accustomed to shabbiness would have been ashamed to be seen in the street in such rags."

Georgi Taratorkin is an actor at the Leningrad Young Spectators' Theatre. He is the same age as Raskolnikov — 23. Recently he made his screen debut, but in a rather unobtrusive role. And now he is playing the role of one of fiction's most complex characters. The range and breadth of Raskolnikov's spiritual transformations present a staggering challenge to any actor. He must experience the fever of temptation, the viciousness of murder, the terror of exposure, the torturing process of moral rebirth. He must suffer agonies of pre-sentiments, hatred and repentance. He must rage against the entire world and then blame

only himself. His emotions constantly veer from one extreme to another — wound up to a pitch of madness or sunk into depths of emptiness; full of pride one moment, humbly begging forgiveness the next. He must be both generous of soul and cruel.

Our buses arrived at the bridge from which Raskolnikov was to escape from the gendarmes by jumping into the dark autumnal waters. Their pursuit and his desperate flight were part of the terrible nightmare Raskolnikov saw on the night after the murder. Strictly speaking, there is no such episode in the novel. The film sequence is a synthesis of Raskolnikov's many dreams and visions. When writing the screenplay with Nikolai Figurovsky, Lev Kulijanov, the director, did not try for a literal rendering of the novel for the screen. Instead he strove to create scenes which would be faithful to the spirit and intent of the original.

To shoot the post-murder dream, cameraman Vyacheslav Shumsky brought into focus not only the bridge across which Raskolnikov was to run, but also a bridge behind it, part of the embankment and a street that leads away from the river. That entire space, made empty of people and traffic, gave the truly St. Petersburg corner of the city a touch of unreality. Such empty cities occur only in dreams.

The camera whirred. Raskolnikov ran onto the bridge. He glanced back like a hunted animal

at his pursuers. Disturbed pigeons flew up in a cloud over the bridge. He ran up to the railings, threw one leg over... then he repeated the scene again and again and it seemed as if these repeats were fragments of one dream which horrifyingly repeated itself over and over...

Then the group went over to the opposite side of Sadovaya Street and again Raskolnikov ran and ran, and was never able to escape...

Rodion Raskolnikov,
played by **Georgi Taratorkin,**
of the Leningrad
Young Specialists' Theatre.

Far right:
Scenes from the film,
with **Yevgeni Lebedev**
as **Marmeladov** (top)
and **Georgi Taratorkin.**



"It was about nine o'clock when he crossed the Hay Market... Rag pickers and costermongers of all kinds were crowding round the taverns in the dirty and stinking courtyards of the Hay Market. Raskolnikov particularly liked this place and the neighbouring alleys when he wandered aimlessly in the streets."

Dostoyevsky's St. Petersburg is a city of sombre colours, murky lanes, rented houses, squalid pubs. It has a beauty of its own but not the kind of beauty that inspired Pushkin. The choice of location stemmed from the atmosphere of the film as well as the cinematic interpretation of the novel.

When I raised the point with

Vyacheslav Shumsky, the cameraman, he said that with every wish in the world to follow the novel literally, visual demands called for a departure from the text. For instance, they did not want to wallow in the mire of Petersburg backyards, in filthy lanes, or to overemphasise Dostoyevsky's morbid, frenzied pic-

Top photo: Svidrigailov (Yefim Kopelyan).

Bottom left: Sonechka Marmeladova (Tatyana Bedova), Raskolnikov, and Raskolnikov's mother (Irina Gosheva).

Bottom right: Raskolnikov hides the jewellery after the murder.



ture of the city. The director, Lev Kulijanov, agreed. It could obscure the meaning, he said, if they clung literally to Dostoyevsky's description of either places or people. In fact, he thought it would lead to a vulgarisation of the original.

It was not easy to find the Petersburg of a century ago in modern Leningrad, even in the old sections of the city untouched by modern building. Overhead wires and TV aerials could be taken care of, but in the Hay Market area where Dostoyevsky's action unfolds, it was next to impossible to work because shop fronts have all been modernised and lifts installed in blocks of flats.

"It is out of the question to film on the Fontanka embankment or on the Moika where scenes from the novel are set," Kulijanov said, "and we have had to scurry all over town in search of suitable spots."

I asked him his opinion of Dostoyevsky's "fantastic realism", as some literary critics define his style.

"In my opinion, Dostoyevsky is a cruel naturalist, a realist in the sense that representatives of the school used the world. His characters are real people, their passions are real passions and it is all on a truly titanic scale. The film will be a far cry from fantastic realism in the sense you mean. Reading into the novel, I feel that above all else it is realistic."

PORFIRY PETROVICH:

"... you maintained that the perpetration of a crime is always accompanied by illness. Very, very original, but... it was not that part of your article that interested me so much, but an idea at the end of the article which I regret to say you merely suggested without working it out clearly. There is, if you recollect, a suggestion that there are certain persons who can... that is, not precisely are able to, but have a perfect right to commit breaches of morality and crimes, and that the law is not for them."

RASKOLNIKOV: "I simply hinted that an 'extraordinary' man has the right... that is not an official right, but an inner right to decide in his own conscience to overstep... certain obstacles, and only if it is essential for the practical fulfilment of his idea (sometimes, perhaps, of benefit to the whole of humanity)... It's remarkable, in fact, that the majority, indeed, of these benefactors and leaders of humanity were guilty of terrible carnage. In short, I maintain that all great men or even men a little out of the common, that is to say capable of giving some new word, must from their very nature be criminals — more or less, of course."

The novel is packed with personages, events, conversations, and nothing in it exists separately, divided neatly into compartments: everything flows

together. The writing of the script presented immense difficulties. However, the scriptwriters have managed to retain not only the manifold trends in the novel, not only all its heroes and secondary characters (the film is to include 28 main personages and 83 secondary ones), but also all the problems it poses.

There were many doubts. Spe-

cifically, the film-makers were afraid that the action might be destroyed by long dialogues. On the other hand, without them, Dostoyevsky's thought would be reduced to a mere skeletal framework. Trial runs showed that the concern was unjustified. The long dialogues proved to be dynamic. The drama of ideas, their collision and struggle is absorbing. Central



Lev Kulijanov, the director (centre), rehearses Innokenti Smoktunovskiy in the role of Porfirij Petrovich, and Georgi Taratorkin as Raskolnikov.

to this drama is the duel of intellects between Raskolnikov and the investigator, Porfirij Petrovich, played by Innokenti Smoktunovskiy.

But alongside the main theme and the main characters, there are other themes and characters, without which everything would collapse, turning Dostoyevsky from a psychologist of genius into a straight-laced moralist. The film will contain the desperate cry of Marmeladov: "... every man must have somewhere to turn..." His daughter, Sonechka, will pass through her stages of humiliation, retaining however, her faith and dignity; the lost soul Svidrigailov will torture himself and others; the decent man Luzhin will act the scoundrel... In a word, the film will try to mirror the book; like the novel, it will convey a fusion of suffering and search for justice, the viciousness of life, the soaring and falling of the human spirit.

"We shall pose the question of whether man is capable of chang-

ing himself," says Kulijanov, "of whether he is capable of moral rebirth."

Naturally, the artist who undertakes to film *Crime and Punishment* must have many inducements, too various and many-faceted to be expressed in clear-cut formulae. But one motivation the director expresses with clarity:

"I believe that *Crime and Punishment* is an anti-fascist book and I want my film to discredit the Nietzschean myth of the superman. The most important thing for us is the search for moral support inside ourselves, a desire to purge man from filth. Today it is more necessary than ever, considering what is going on in the world. I have been preparing to make this film for many long years, but even in my boldest imaginings I could not anticipate that it would be so timely. The story has always been relevant, but never more so than today."

RESORT IN THE ANTARCTIC

A warm lake steaming in a deep hollow surrounded by a small melted area has been discovered amid mountains of ice not far from the Soviet Antarctic Station Novolazarevskaya. In November and December the ground by the lake warms to 86° and 104° Fahrenheit. Scientists rest, bathe and bask in the sun just as they would in the South Crimea.

JEWELS UNDER THE GRIME OF YEARS: RESCUING HIDDEN ICONS



by Vladimir
SOLOUKHIN
from NOTES OF A
BUDDING COLLECTOR
in the Magazine *Moskva*

In 1967 when his *Letters from the Russian Museum* was published Vladimir Soloukhin's reputation as a poet and writer was well established. His work is filled with a love of nature and interest in the unique culture of ancient Russia.

In his *Letters*, which aroused a great deal of comment, he makes a passionate appeal for the preservation of relics and monuments of the past, pointing out that what is new and fashionable is not always superior. He believes that oil paintings, icons and samples of architecture should be carefully preserved as a record of the cultural history of the Russian people. His *Notes of a Budding Collector* is a sequel to the *Letters*.



You've never collected anything? Then you'll find it difficult to understand my enthusiasms for things that perhaps don't appeal to you at all. But this is how I got the collector's bug.

One day I was visiting one of Moscow's well-known artists and I was amazed at the number of icons hanging on the walls of his studio. There were some as big as church windows and they ranged in size down to the small ones which usually take pride of place in the peasants' cottages.

Until that moment I hadn't really been aware of icons. My interests were fairly wide but icons were not among them. That made it more surprising that they interested me so much then. Perhaps it was the way I saw them. They weren't ranged in rows as they would be in the church iconostasis, they were mixed in with other pictures and curios — a quaint wooden scoop or a beautiful old piece of ribbon that had once tied some girl's plait...

I knew that some people collected icons and a friend of mine had raved about an amazing fifteenth century one he had seen somewhere, but as I'd never felt the urge to study even the icons in the Tretyakov Gallery, I'd forgotten these stories.

Suddenly I began to notice them. My hostess took me from one icon to another explaining to me the distinct and sometimes unique characteristics of each

one. But it was like trying to explain the colours of a sunset to a blind man.

"This is a fairly late icon," she told me, "end of the eighteenth century. But it is the work of a remarkable artist. Look at the reds in it. See how they spread across the picture from just a touch in the left hand corner to culminate in the clothes of Christ.

"Or look at this one. It's the gem of our collection — the end of the fifteenth century. What bold economy of line! How expressive it is! That icon is a feast of colours, in this one mere lines are enough. Now have a look at that red icon. Small as it is, it would be enough for a whole wall in a modern interior."

Then I was shown a board 20 ins X 28 ins. On it was depicted Christ on the donkey. It had a very interesting composition — a large tree and people strewing palm fronds before the donkey's feet.

"This icon is called 'The Entry into Jerusalem', or more popularly 'Palm Sunday'. It has survived quite by chance. We happened to spend a night in the home of an old woman in Voloda and she was using it to cover her tub of salted cucumbers!"

"How could she? Even I who know nothing about painting and still less about icons can see it is beautiful."

"Well, if it had looked as it does now that old woman would

probably never have used it as she did. We can show you some icons which cover tubs or just lie around anywhere. Let's take this one. Put it on the table."

I picked up what appeared to be an old blackened piece of board and did as I had been asked. There seemed to be nothing to it. Here and there the black paint had peeled off baring some whitish patches. In one place it looked as if a layer of stucco had fallen away and small holes showed where it had once been attached to a frame.

My hostess took some cotton-wool, dipped it in a saucer of sunflower oil and began to wash the board with it. Beneath the pitch-black surface an image began to appear. It was amazing.

"Could so much dirt have accumulated over the centuries?" I asked. I really thought it was all dirt.

"It's not dirt, it is drying oil which was put on to protect the surface from moisture and scratches, and to make the icon shine. In the old days they used drying oil instead of varnish. But drying oil is tricky stuff. In 80 or 100 years it darkens so much that instead of making the icon look bright and shiny it puts a dark veil over it. We'll make a little window in this veil."

The artist and his wife worked together. They seemed to be in a hurry but they were doing the job without much fuss. Nina, my hostess, cut a small rectangular piece of flannel which she dipped

into another saucer containing some very smelly liquid.

"Where shall I put it?" she asked her husband. "Shall I start with the face?"

"No, let's be a bit more circumspect and begin with the clothing. Put it here. If I know anything about it we'll see pearls here."

Defly Nina spread the flannel in the centre of the board, smoothing out the edges. Then she put a piece of glass over the flannel and pressed it down.

"Weight!" the artist commanded urgently.

A heavy weight was pressed upon the glass. We straightened our shoulders, took a deep breath and stood back. The chemical process took several minutes to work.

Then the weight was removed and the glass carefully lifted off the flannel. Something dark brown showed through the rag and there was a dark sticky patch on the glass.

Quickly they began to tear off the rag which seemed to have stuck fast, but it came off and I saw that the patch it had hidden had swelled and loosened. Without losing a moment Nina dipped a tight wad of cotton-wool into the same smelly liquid (it's now my favourite smell) and rubbed it gently over the swollen patch of drying oil. Her gestures were like those of a sorceress. Incredibly bright blues and reds gleamed as she lifted the dark patch. I felt as if I had witnessed

a miracle. That the dull black cover had hidden such sharp, vibrant colours seemed to defy the imagination.

"Nina, Nina, do it calmly, with love. Don't hurry!" the artist said as his wife took up a scalpel.

Using the sharp scalpel, with precise and measured movements, Nina cleaned off the drying oil from where it had stuck hard. Now there was a real "window" in the veil. Through it everything appeared bright and festive. We seemed to be looking at a small screen flooded with light. It disclosed the beauty of long-gone days — a mysterious, fabulous world.

"Oh, this isn't what I expected!" the artist exclaimed.

"Why? It's wonderful." I said.

"What's so wonderful here? It's just a daub. Look at these thick untidy lines. The clothes are just slapped on indiscriminately. As Pushkin said '... a sleepy dauber's hrush has crippled the work left by some genius'. Surely this is overpaint. Nina, let's go deeper."

When I asked what he meant by "overpaint" and "going deeper" he told me:

"We have only removed the drying oil. There may be something else. There may be nothing. It's always risky but if this painting is all there is it's not much lost and if it does conceal something..."

"But what can there be under this picture?"

"Another layer of drying oil and then another painting. It might be the work of a real genius. In the old days when an icon turned black they didn't throw it away, they got icon painters to restore them. The artists followed the old outlines as best they could. Then, the new pictures were oiled and eventually they too had to be restored and so on. Imagine how many layers of paint and oil have been overlaid on a fourteenth or fifteenth century icon. Let's remove this crude daub and see if we can get to the original. We'll cut another window; perhaps into the sixteenth century. The one we have now is a poor example of late eighteenth century icon painting."

It seemed incomprehensible to me but I watched and listened. Nina went through the process again but this time the saturated flannel lay on the bright colours of the exposed painting.

While we waited for the chemical process to work we talked of old painting. I was learning a great deal.

"There was a time when no one knew about our wonderful old paintings. By the beginning of the fourteenth century, the eleventh and twelfth century icons had been overpainted with later ones, of the thirteenth century and this happened all through the years so that each generation only knew about the paintings of the preceding hundred years, and latterly even those

were overlaid again with gold, silver and brass mountings.

"Nobody knows who first unlocked the secret or how he hit upon it, but whoever he was he deserves a monument.

"Many people began to collect and restore icons and many beautiful paintings were recovered. Before long expert restorers appeared. Today most of the icon collections are in our great museums — the Tretyakov Gallery, the Russian Museum, the Hermitage and so on."

"And what about private collections like yours?" I asked.

"Mine isn't much of a collection," he said, "I have only one or two which are worth much, but private collections do exist. Collecting icons is much harder and more expensive than collecting matchboxes or labels from wine bottles. It's pretty hard to buy a good icon; they change hands within the closed circle of

collectors. It would be simpler to find one in some old woman's garret or in an old disused church. And then it would have to be restored and that's a costly job... Now let us see what we have under the glass."

The process was repeated.

"Do it carefully, Nina, don't hurry... Oh! I knew we would see pearls."

We held our breaths as Nina worked with the scalpel and revealed a piece of painting so fine that we gasped. Two rows of pearls which must have trimmed the robes of a saint came through against a background of tender gold.

"Pearls! That's sixteenth century. Look at this bold energetic line!" the artist said exultingly.

Nina kept calmly cleaning the opened rectangle. Her restrained smile showed her satisfaction. I must have seemed completely stupefied.

* * *

I went home to my native village for my summer holidays and settled down to my usual round. Nothing in my life had changed but something within me had. Ever since I was a child I had visited my neighbour, Uncle Nikita. I must have been in his home countless times but I'd never noticed much about it. This time my eyes swept the familiar walls as they had hundreds of times before but now, for the

first time in twenty years, they stopped suddenly. Over in one corner was a large coal-black board!

"Take it to the window where the light is better," said Uncle Nikita as I went forward to peer at the board.

I took the icon off the wall and in the better light at the window I managed to discern the cherry-coloured clothes of a saint through the dark layer of oil. He

wore a crown and had a censer in his hand. When I tilted the painting I saw that some parts stood out in relief and I immediately thought of the barbaric work of some latter-day artist.

"Uncle Nikita, would you give me this icon?"

Left (upper photo): Artists at work on an old painting in the restoration studio of the Hermitage in Leningrad.

Left (lower photo): another painting has been restored to its original state in the Hermitage studio.



Above: An expert takes a look at the icon "St. Paraskeva Fyatnitsa", the only surviving relic of the early Ryzan school (late 14th-early 15th century).



Below: Restorers hold a consultation on the best way to tackle the restoration of an icon of the northern school.



"Certainly. Take it if you want it."

And that was how it started. I entered Uncle Nikita's home a fairly ordinary mortal and half an hour later I left transfigured. Everyday concerns disappeared before the urgent, fierce joys and sorrows of a collector. I left Uncle Nikita's a different man.

I took my icon home and put it on the table. Carefully I rubbed the painting with sunflower oil. A cherry-coloured patch began to show through the dark surface. I would have to make a compress too — I had flannel, glass and a weight, but I had none of the solvents the artist had used. So I just rubbed on with the oil.

As I worked the painting came through brighter and brighter and I felt excited and happy.

When you start a collection you feel a compelling urge to make it as large as possible very quickly. You don't stop to think that it takes decades to build up a real collection. You want to build yours in three days!

Later on Pavel Korin, the artist, showed me his collection, said to be the best private collection in the Russian Federation, and he told me:

"It is not so simple and it requires a great deal of money. My first collection was quite different. Then I became more discriminating. I sold five poor icons to pay for a fairly good one. Then I sold three moderately good ones to buy one really good icon. It took three of these to acquire one

first-class painting, an amazing and beautiful thing. It has taken me 40 years to build up this collection of truly superb icons. Practically everything I have earned as an artist has gone to build it."

Only then did I realise that there are different levels of collecting. I would have been quite unimpressed if I had found a collection of pebbles or buttons or birds' eggs at Korin's. It would have seemed paltry and meaningless. All collectors can be extremely dedicated but it is what they collect that seems to matter. Is not one real work of art worth several tons of pebbles even if they form a quite unique collection?

How wonderful it would be to find and restore an old masterpiece and give people the chance to admire it! Icon painting is a great ancient art form and many icons have been lost for ever.

"As long as I live," Korin told me, "I will enjoy these icons, absorb their beauty and imbibe their spirit. Then they shall go to the government for everyone to see."

"I can see the sparkle in your eyes. Perhaps you will become a collector, too, and find and rescue a few icons. Remember that they are great works of art — by collecting butterflies and pebbles you collect only butterflies and pebbles but by collecting ancient Russian icons you collect the very soul of your people..."

A MEDAL TO HONOUR YURI GAGARIN

At a session in London, the general conference of the International Aviation Federation (FAI) agreed to institute a gold medal commemorating the world's first cosmonaut, Yuri Gagarin. The FAI Council will present it annually to the most deserving spaceman for achievements in the field of space-for-peace.

The medal is a round disc some 1.2 inches in diameter and about 0.08 inches thick. On the face is the profile, in relief, of Gagarin in a space helmet. Skirting the edge of the disc is the inscription: "Fédération d'Aviation Internationale. Y. A. Gagarin."

On the reverse side, a spaceship flying over part of the Eastern hemisphere is depicted in relief. Around the edge of the disc are the words: "Le premier vol de l'homme au cosmos. 12. IV. 1961."

From IZVESTIA

A CALLING CARD

(from Professor Y. Musapekov's collection, Jaroslavl)

The famous Russian chemist, Professor A. Butlerov was an extraordinarily strong man. He easily juggled with weights of 40 pounds in each hand. Once when still a young man he went to see a friend, who happened to be out. Butlerov looked around the room, saw a heavy poker, bent it into the shape of the letter B, and left.

The "calling card" left no doubt as to the identity of the visitor.

* * *

The best type of man is motivated by his own ideas and by the feelings of others; the worst appropriates other people's thoughts for his own but is moved by personal feelings. The great diversity of human personality is a blend of these four motivations.

Some have virtually no ideas at all, either of their own or anyone else's, and live almost entirely by the feelings of others; these are saints, the selfless idiots. Some do all their thinking themselves; these are the men of wisdom, the prophets. Some live on borrowed ideas; they are the well-educated fools. The whole spectrum of human character springs from various combinations of these properties.

Leo TOLSTOY

Problems concerning the age of retirement and family relationships are only two of those confronting sociologists and society as a whole as a result of the ageing of the population in many countries. In the USSR, for instance, where the number of old people is continually growing as a result of a certain fall in the birthrate and increasing longevity, it is estimated that by 1979 a third of the population will be over 60 (13.7 per cent of men and 21.4 per cent of women). This article discusses ideas about how some of the resultant social problems should be tackled...

SOCIAL PROBLEMS

by Valeri Golofast
sociologist

from the magazine
NAUKA I TEKHNIKA
(Science and Engineering)

OF OLD AGE



When Is a Person "Old"?

According to the Bible, old age begins at 35. Hippocrates, the most celebrated physician of antiquity, set 42 as the beginning of old age, and 63 for venerable age. Today, some demographers refer, in a purely relative way, to two periods of ageing: people of more than 60 are considered elderly, while those who have reached 75 are classed as old.

Another view is held by gerontologists, the experts who study longevity and the process of ageing. They believe that old age really begins much earlier than 60, and some even consider that the first signs appear at 40-45 years for women and 50-55 for men.

Then there is statutory "old age" — when a person qualifies for retirement pension. In the USSR this depends on sex and trade or profession. Some categories of workers qualify for pension at 45 and even earlier; on the average, men have the right to a pension at 60, and women at 55.

From the point of view of how they fit into everyday life, old people are those who require constant attention by others to supply their vital needs, and this is usually when a person is about 75 or 80.

We sociologists also have our criteria, beginning with our criterion of maturity, which we say occurs when a person assumes full responsibility as a member of society, that is, when he is capable of assuming economic,

political, family and other responsibilities, most important of which is the ability to perform socially useful work. Therefore, for us it is loss of working capacity as a result of ageing that is the main sociological indicator of old age.

Working capacity varies throughout the life cycle (see table). Among certain sections of the population, there is a noticeable loss before the usual limit adopted in the USSR is reached (part A of table). But society does not reduce its demands on people of pre-pension age whose working capacity has decreased without any sufficient cause (illness or accident). Those whose working capacity is lowered through illness or accident receive a disability pension irrespective of their age.

Another factor which must be taken into account is the kind of work a person does, some trades and professions being more exacting than others.

On the other hand, there are those who retain the capacity to work after they have reached retirement age (part B of table).

Working capacity usually decreases by degrees and this factor conflicts with inflexible legal standards: a person may feel fit enough to go on working, but nevertheless has to give up the job or go on working at the same intensity as previously, which may be harmful to health.

From this contradiction there arises a host of problems, to solve

which some suggest that the retirement age should be extended, while others consider that production processes and methods should be adapted to the possibilities of ageing people. The first suggestion, however, would be a danger to health, while the second is utopian, involving re-ordering of modern industrial production that would be beyond the bounds of practicability.

Much more realistic is a proposal to transfer people of pre-retirement age, whose working capacity is falling, to less exacting jobs, and this is frequently done in the USSR.

The "Tertiary" Family

The social position and functions of the aged is another important and complex problem confronting Soviet sociologists.

Let us look at this from the point of view of the development of human society. In more primitive societies in the past the aged were especially revered, their age determining their social status, power and influence. Gerontocracy (rule of the aged) prevailed, resting on the premise that the memory of the aged was the main source of the information necessary for the continuance of society — traditions, general knowledge, life experience, customs and trading practices. Human memory was the only record at the disposal of society. The old people exercised social control over society's members. Family is the principal

social unit in every society, but in earlier times the family was composed of several generations, tending to strengthen the position of the aged, who were entitled to control and dispose of the common property and to give a binding ruling on vital questions. Considering that they were only a small group, this put the aged in the leading position in all social institutions.

This situation has now changed substantially. Today, the principal family form is not patriarchal, but could be termed "nuclear", consisting only of husband and wife and their offspring. Nowadays young people leave the parental roof and establish their own families. As a result, there appears a completely new type of family, a family of the aged, which sociologists term "tertiary". So now "nuclear" and "tertiary" families form the basis of new relations among three generations: children, adults and the aged.

Problems Emerge

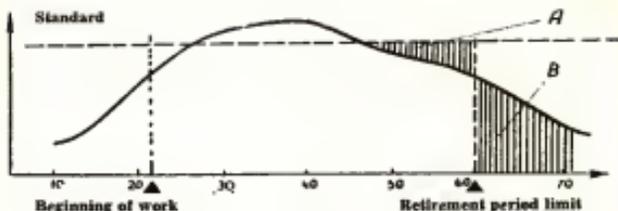
With changing social conditions, elderly people lose their former position, and now have to share with a wide network of social institutions — school, industry and so on — their formerly exclusive functions of social control and influence. In our society, the control over personal (family) property loses its former significance. The functions of socialisation of the growing generation are now shared by

the parents with school, groups of youngsters of the same age as their children, and mass media of information and propaganda. The aged, it is true, retain their former high moral authority, but on the basis of cultural traditions alone, and not integrally.

Hampering the psychological adaptation of elderly people to their new conditions after retirement is the fact, shown by experience and investigation, that they find it difficult to fully realise their present position in society. They are often haunted by feelings of isolation and aimlessness.

Some interesting results were obtained in 1967-68 by sociologists investigating the living conditions of Leningrad old-age pensioners. It was found that 23.4 per cent (aged between 60 and 64) lived by themselves, apart from their families, as did another 36.4 per cent aged 65 or older. If we add to them "tertiary" families the percentage will be 52.9 and 70.9 respectively.

Although many pensioners keep up more or less regular contacts with their relatives, neighbours, former colleagues and friends, these contacts are not daily, emotional ties but are only occasional, connected with holidays, family events or practical help. Less than half of those polled had visits from relatives or neighbours as frequently as once or twice a month, the remaining half receiving visits only a few times a year, or even less



frequently. It was also shown that the pensioners met their former colleagues and friends just as infrequently. So it can be seen that elderly people often find themselves cut off in a kind of vacuum, a fact which must alarm us. Psychologists are well aware that without constant, purposeful ties and active interests in common with others, people lose their aim in life and the feeling that their lives are useful to others.

A Way Out

Sociologists agree that it is difficult nowadays to find a satisfactory way for people to adapt themselves to old age. Weakening of blood ties in our epoch is an objective process which cannot be ignored. The socio-psychological aspect of old age should become a matter of prime concern for all.

One way to satisfy the needs of old people for human contacts would be to increase the number of special homes for the elderly.

Our society takes great care of the aged, as far as their living and housing conditions are concerned, as well as their medical needs. A considerable number of homes for the aged are already in existence, and more are being provided, but this should not be the only means of tackling the problem. Elderly people retaining considerable capacity for activity should not have their human ties reduced to contacts with people of their own age. We sociologists suggest that they should have closer contacts with relatives which could lead to reuniting grown-up children with their parents and to the dissolving of the "tertiary" family into a "nuclear" one.

It is sometimes said that Nature herself indicates to the aged the road to their children. At the same time, one should not forget the difficulties there are in establishing contacts between the old and the young. Young people are better educated, in general, than their

elders, but while the education gap will be reduced in coming years, there will remain other obstacles to maintaining strong ties between the generations. The main obstacle, we believe, is a difference in attitude to spiritual, ethical and material values, a problem the solution of which experience shows to be extremely complicated.

We sociologists maintain that

for the present the dissolving of the "tertiary" family should proceed by way of the young people's profound understanding of their moral duty to the old. After all, unification of the two kinds of family will be accomplished not so much for the sake of helping the young (which for ages was one of the main functions of the old) as for the sake of helping the elderly.

DANCES AT 130 YEARS OF AGE

Kufat Lasuria recently celebrated her 130th birthday, but she still dances solo in the Abkhazian old folk's song-and-dance ensemble. Many of the dancers — they are mostly men in the ensemble — are over 100.

Members live in widely separated villages of Abkhazia, an autonomous republic within Soviet Georgia. They travel long distances twice a year for rehearsals.

From the newspaper SOVIETSKAYA KULTURA

SUBSTITUTE FOR PENICILLIN

Guilty microbes become "adapted" to penicillin when this antibiotic is used over a long period, and the curative effect is drastically reduced. After sustained investigations the Riga Medical Preparations Plant and the Soviet Union's Antibiotic Research Institute have obtained a medicine to replace penicillin. This semi-synthetic penicillin, named menicillin, is prepared on the basis of hexaminopenicillic acid. It will probably be used in treating a wide range of diseases whose agents no longer react to penicillin.

*From the Latvian magazine NAUKA I TEKHNIKA
(Science and Engineering)*

Soviet interplanetary stations have finally shattered man's romantic dreams about the planet Venus. Information they have collected show that the "Morning Star", named after the goddess of love, is torrid and



Slimmer Hopes of Venus

from the book *The Universe, Life and Reason* by Professor Joseph Shklovsky and a TASS report about the Soviet interplanetary stations Venus-5 and Venus-6

barren. Venus-5 and Venus-6, two of the exploratory space stations sent up by the Soviet Union, landed on Venus in May 1969. What have they added to man's knowledge of this planet?



Knowledge Accumulated in Three and a Half Centuries

Scientific study of Venus commenced 3000 after the invention of the first telescope. In 1610, Galileo, with his primitive instrument, was able to report on the phases of Venus — the changes of light falling on it, something similar to the phases of the Moon.

Lomonosov's discovery of the Venusian atmosphere in 1761 was so important a step forward. It directed universal attention to this planet which seemed to be very much like the Earth.

Astroonomers and science fiction writers have always regarded Venus as an ideal refuge. It appeared to have all the conditions for the emergence and evolution of living beings. Its size, mass and gravitational force are very much the same as those of the Earth. And, as Lomonosov discovered, it has a "substantial" atmosphere. Though a cloud blanket hides the surface of the planet from sight, it is bathed in intense sunlight — twice the intensity per unit area as the rays of the sun on the Earth.

But the more man studies Venus the slimmer grow his hopes that it is habitable.

Earlier this century instruments which measure invisible radiation of the celestial bodies such as infra-red rays were added to the astroonomers' tools — the telescope, the eye and the ca-

mera. These measurements gave some indications of the temperature and chemical composition of the Venusian atmosphere above the cloud blanket, but unfortunately these results proved contradictory.

In the fifties radioastronomy opened up new fields. The radio-telescope, with its huge bowl-shaped antennae, is able to measure the invisible radio waves, longer in wave-length than the infra-red rays. Radio waves are emitted by any heated body including the Earth, Venus and the stars.

These radio waves, or electromagnetic oscillations, are not intelligible signals. They resemble "atmospherics" on the radio, but they provide valuable information regarding their source, and they pass through the atmosphere unhindered. The radio-telescopes are like the ears of the Earth, and they can "hear" the weakest cosmic radio signals, through any atmosphere.

This was the way scientists learned that the Venusian surface temperature is very high. They guessed that it was probably higher than the boiling point of water, and that there was little difference in the temperature of the "day" and "night" sides of the planet. To their surprise they had to conclude that Venus could not support life.

The results of Soviet and American scientists' radar investiga-

tion of Venus gave added support to this conclusion. They found that the planet revolves on its axis roughly once every 230 terrestrial days. Were man able to stay on Venus he would see the sunrise and sunset only once in a Venusian year . . .

Measurement of the temperature of the surface of Venus is one of the greatest achievements of radioastronomy, although the accuracy of the results left much to be desired. There was some doubt even about their credibility.

The atmospheric pressure remained unknown though various figures from one to a hundred atmospheres were quoted.

Some astronomers abroad even suggested that the "atmosphere" of Venus consisted of oil!

Summing up ideas about Venus in 1965, Dr. Shklovsky said: "It appears that the physical conditions on the surface of the Earth's cosmic neighbour render impossible the existence of any form of life there."

Since 1961 — The Venus Probes

The first Venus-directed interplanetary probe, Venus-1, was launched by the Soviet Union on February 12, 1961. On November 12, 1965, Venus-2 was blasted off and four days later Venus-3 went up. Less than four months later, on March 1, 1966, Venus-3

touched down on the planet Venus and left on its surface a pennant bearing the national emblem of the Soviet Union.

These flights opened the way for the long awaited experiment, the actual "on site" measurement of the physical constants of the Venusian atmosphere. On October 18, 1967, after more than four months of travel, Venus-4 entered the Venusian atmosphere and for 93 minutes reported back to Earth data on its temperature, pressure, density and chemical composition. This short broadcast brought richer information than centuries of astronomical observation had done.

It had been assumed that by analogy with the terrestrial atmosphere, the Venusian atmosphere was mainly nitrogen. The carbon-dioxide figure had then been estimated at from five to ten per cent. It turned out that the atmosphere is 90 per cent carbon dioxide. Pre-flight guesses at the temperature and pressure varied widely from a few degrees to hundreds of degrees Centigrade and from one to 100 atmospheres on the surface of the planet. Venus-4 showed them to be at least 270° C and 18 atmospheres.

The American space vehicle, Mariner-5, which passed Venus at a distance of 2,480 miles the day after the Venus-4 mission was accomplished, made a different study of the planet. The

results obtained by the American experiment, in conjunction with the Venus-4 gas composition data, gave scientists a better understanding of the planet's upper atmosphere, which the Soviet interplanetary station had not studied.

But there were still many questions unanswered. Venus-4 had stopped functioning before it reached its target and the surface temperature and pressure, believed

to be higher than the atmospheric values, were still to be measured. It was thought that the high pressure and density of the planet's gaseous environment may have damaged the space station and its instrumentation.

On January 5, 1969, Venus-5 was set on course, and five days later Venus-6 followed. Their descent vehicles were more sophisticated and sturdier than that of Venus-4.

Concentration of gases in the Venusian atmosphere	Venus-4	Venus-5 and Venus-6
carbon dioxide	90 %	from 93 % to 97 %
nitrogen (with inert gases)	less than 7 %	from 2 % to 5 %
oxygen	less than 1 %	less than 0.4 %
water vapour content at levels corresponding to a pressure of 0.6 atmospheres	from 1 to 8 milligrammes per litre	from 4 to 11 milligrammes per litre

The parameters of the atmosphere which were registered at certain intervals during the stations' descents fell within the ranges given below:

	Venus-4	Venus-5 and Venus-6
temperature	25° C to 270° C	25° C to 320° C
pressure	0.5 to 18 atmospheres	0.5 to 27 atmospheres

Four and a half months later they reached Venus. They were programmed to enter the planet's atmosphere at an interval of one day; Venus-5 at 0601 GMT on May 16 and Venus-6 at 0605 GMT on May 17.

At the start of the descent the speed of each station was more than 6.8 miles per second, but within a short time it had dropped to 689 feet per second. After that automatic devices brought a parachute system into action and switched on the radio instruments; the antennae of the radio-altimeter, which was capable of registering distances to the planet's surface over a range of 31 to 6.2 miles opened out. Then the measurements began. These were "memorised" and beamed back to earth by radio transmitters.

Venus-5 transmitted for 53 minutes and Venus-6 for 51 minutes. The reports confirmed the information obtained from Venus-4 and gave more details.

According to the data received from Venus-5, the pressure of 27 atmospheres corresponded to an altitude of approximately 15.5 miles while the Venus-6 data gave the altitude as 6.8 miles. These different radio-altimeter readings were, apparently, due to the extremely rugged relief of Venus. The two stations touched down comparatively close together as planned, on the "night"

side of the planet where, it is to be assumed, there are some high mountains.

Variations in temperature and pressure in relation to the altitude permit scientists to estimate these values for the surface level. Figures derived from the Venus-5 data are 530° C and 140 atmospheres and those from Venus-6 are 400° C and 60 atmospheres.

Processing of the data is continuing and it is possible that some corrections will be made. However, more and more evidence is accumulating showing it to be virtually impossible for life to exist on Venus.

In his book *The Universe, Life and Reason*, published in 1965, Dr. Shklovsky wrote: "No protein compounds can exist in such conditions. Finally, the absence of a hydrosphere even at the early stage of the planet's formation must have been an extreme impediment to the formation of early, primitive, living matter."

The same chapter, headed "Possibilities of Life on Other Bodies of the Solar System", contains this passage: "However paradoxical it may appear, the rigorous physical conditions on the surface of Mars favour the development of life much more than the warm (regrettably, too warm) Venus... Large planets such as Jupiter may prove to be more suitable for supporting life than Venus."

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